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ABSTRACT

This report is primarily a background statement and historical report concerning the Environmental Education Program cooperatively developed by the School of Education and the School of Liberal Arts of Eastern Montana College, Billings, and Billings School District #2, covering the years 1967 through the spring of 1971. The report gives a brief statement of definition and of the need for environmental education, then a summary of the objectives, content, curriculum, financing, management, and growth of the program. Teacher, camp counselor, and back-up instructor training; precamp preparation for students; and the content of camp sessions for sixth grade children (instructional components) are emphasized. In the first 5 years of its operation, the program was funded by parent teacher associations of the respective participating schools--no federal, state, college, or school district money was used. Success of the program was indicated by the local enthusiasm and the growth of the program. The program has grown from involving one sixth grade classroom of 29 students in the spring of 1967 to 33 sixth grade classrooms from 12 schools and containing approximately 900 children in the spring of 1971. Appendixes of related data are included. (Author/MJM)

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THE ENVIRONMENTAL EDUCATION PROGRAM
1967-1971

Eastern Montana College
School of Education
School of Liberal Arts
Billings, Montana

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SP 005 808

Summary of the Environmental Education Program

cooperatively developed over the last five years by

Eastern Montana College, Billings, Montana

and School District #2, Billings, Montana

The Report accompanying this Summary describes in detail an Environmental Education Program that now is in its sixth year of operation. Salient aspects of this program that make it worthy of consideration for the Distinguished Achievements Award are these:

1. Unlike most Environmental Education programs, we did not "hold our breath" for Federal Funding -- an often precarious and ephemeral source of support. This program has had to date no federal funding, no State funding, no budgeted School District funding, and no budgeted College funding. It has been totally supported by the Parent-Teacher Associations of the respective schools. (See Report, Appendix E, page 1 for financial data.)

2. The program, from its inception, has closely meshed In-Service Teacher Workshops, college student involvement, sixth-grade classrooms of children and their teachers, elementary school principals, certain college faculty members, and the Central Administration Office of School District #2.

3. Leadership for and involvement in the program at the College has been interdisciplinary. It has involved, from the School of Education, the Division of Elementary and Secondary Education, and the Department of Physical Education. From the School of Liberal Arts it has involved the Division of Science and Mathematics drawing on the areas of Earth Science, Biology, and Conservation, and has had good cooperation and help from the Art Department in the Division of Humanities.

4. Teacher-Training In-Service Courses and Workshops in Conservation Education have been carried on formally for many years at Eastern Montana College. However, with the inception of this program in 1967, specific training for the teachers involved was done on an informal basis in 1967 and 1968, and on a formal basis for all interested teachers and principals in 1969, 1970, and 1971. In these last three years, 116 teachers (of whom 11 are now Elementary School Principals) have had our Environmental Education Workshop. Also, 122 undergraduate college students at EMC have taken the workshops, many of whom subsequently worked with the children. (See Report, Appendix A, Table I for data.)

5. A critically important aspect of the total program has been involvement of college undergraduates in the camp operation. Special Counsellor Training Workshops were offered starting spring quarter, 1970, and since that time 179 college students have taken these. A condition of satisfactory completion of the course is for the student to serve for at least one session as a cabin counsellor or in some other capacity in the camp portion of the total Environmental Education Program. For instance, drawing on students from the Counsellor Training Course or from the Workshops, our Spring 1971 program involved about 170 different college students. (See Report, Appendix A, Table I for data.)

6. The following data will give some idea of the size of the District #2 System. In 1970-71, the System had 24 elementary schools, 395 elementary teachers and principals. The sixth-grade classrooms alone numbered 54 and contained about 1500 children. The schools and the children represent all social and economic strata, from the wealthy white to the poor Chicanos, Indians, and a few blacks, all of whom have been "scrambled" in the camp programs. Of the 395 teachers in the system in 1970-71, 83 then in the System had taken an Environmental Education Workshop, and 11 of the 23 principals had also done so. (See Report, Appendix A, Table II for data.)

7. This Environmental Education Program has grown from spring 1967 figures of one school, one classroom, and 30 sixth-grade children to spring 1971 figures of 12 schools, 33 classrooms (out of the total 54 sixth grade rooms in the System), and about 900 children. (See Report, Appendix D, page 1 for data.)

8. Broad community support for the Program is quite evident, as illustrated by the PTA financing, contributed time of local medical doctors, and assistance of some of the Federal and State agencies, of service clubs (notably the Billings Lions), of the District #2 School Board, of the School Administrators, and of many individuals. (See attached letters from many of these people.)

9. In August of 1971, the enclosed Report was prepared for presentation as a Progress Report to the District #2 School Board. Since that time the Board has:

(a) Appointed a Coordinator of Environmental Education.

(b) Planned to continue the program in 1971-72 at least at the 1971 level, and it hopes to be able to budget for expanding the program soon to cover all sixth-graders in the system.

(c) Requested that Eastern Montana College continue to handle the Teacher Training and the Counsellor Training and recruitment (which we at the College had offered to do). The College staff also now is working on moving the environmental education program in the school system both below and above the sixth grade level.

We believe this Environmental Education Program represents a fine example of a college exerting creative and dynamic leadership in curriculum development, in teacher training, in undergraduate student involvement, and in stimulation of a high level of local school and community cooperation and support, all with the objective of meeting more fully our teaching obligations to the child in the classroom.

We therefore submit this program for consideration in the Distinguished Achievement Award Program, as a joint endeavor of the School of Education and the School of Liberal Arts of Eastern Montana College, working cooperatively with Billings School District #2, the local Parent Teacher Associations, and numerous individuals.

REPORT and
APPENDICES

Report on the

First Five Years of Operation (Spring 1967 through Spring 1971)

of the

ENVIRONMENTAL EDUCATION PROGRAM

in Billings, Montana

-- a program developed cooperatively by the School of Education and the School of Liberal Arts of Eastern Montana College, teachers, principals, and administrators from Billings School District #2, and citizens of the community.

-- Report prepared August 9, 1971, for presentation to the District #2 School Board.

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Staff of the Environmental Education Program

-- and their tenure of service in the program.

(Note: EMC -- Eastern Montana College)

Co-director of the Program --

Professor Erick Erickson. Principal of the EMC Campus School and Associate Professor of Education, EMC. With the program since spring 1967.

Co-director of the Program --

Dr. Wilson F. Clark. Chairman of the Division of Science and Mathematics of EMC, and Professor of Conservation Education. With the program since spring 1967.

Other Staff --

Dr. Helen Grilley. Professor of Education, EMC. With the program since 1967.

Dr. Norman Schoenthal. Professor of Biology. Ecologist. With the program since 1967.

Mr. Tim Mares. In spring 1967 was sixth-grade teacher in the EMC Campus School. Since fall of 1967 has been Principal of the Taft School.

Professor Elmer Andersen. Associate Professor of Earth Sciences, EMC. With the program since spring of 1967.

Mr. Ed Heiser. Joined the program in fall 1967. Was sixth-grade teacher in the EMC Campus School for spring 1968, 1969, and 1970 programs. In fall 1970 became Principal of Rose Park School. In summer 1971 became coordinator of Title I Programs in the Central Administrative Offices of District #2, and District #2 Coordinator of Environmental Education.

Professor Roland Grant. Assistant Professor of Earth Sciences, EMC. Joined the program staff in fall 1970.

Mr. Charles Reed. Joined the program in fall 1970, as sixth grade teacher of the EMC Campus School.

Dr. Helene Northcutt. Professor of Art Education, EMC. Joined the program in the spring of 1970.

I. Introduction

The purposes of this report are to give a brief statement of definition and of the need for environmental education, then to present a summary of the objectives, content, curriculum, financing, management, and growth of the Environmental Education Program cooperatively developed by the School of Education and the School of Liberal Arts of Eastern Montana College, and Billings School District #2, covering the years 1967 through spring of 1971. This program is a unique one in the State, perhaps even unique throughout the nation, in that in the first five years of its operation it has been a totally locally developed program, and has been funded by the Parent Teacher Associations of the respective participating schools. There has been no federal money, no state money, no college money, and no school district money specifically assigned to this program. And the program has grown from involving one sixth-grade classroom of 29 children in the spring of 1967 to 33 sixth-grade classrooms from 12 schools and containing approximately 900 children in the spring of 1971.

This report is, then, primarily a background statement and an historical document. It does not speculate about the future of the actual program, although such plans and speculations certainly have been discussed by the staff.

II. Definition of Environmental Education

A semantic morass exists at present concerning the three terms conservation education, outdoor education, and environmental education. Much hair-splitting has occurred. Various academic areas have sought to pre-empt one or another of the terms. In this program we have frequently used Outdoor Education, since a significant aspect of the program involves study and investigations outdoors -- out of the classrooms. But this term means to many people merely anything one does out of doors -- sports, camping, hiking -- and this is the meaning the Physical Education field has given the term. Such a meaning does not embrace our philosophy. To reflect that philosophy we will consistently use the term Environmental Education.

Of the many definitions developed, the one which best expresses the philsophy of this program is as follows:

> "Environmental education consists of the recognition by man of his interdependence with his environment and with life everywhere, and the development of a culture which maintains that relationship through policies and practices necessary to secure the future of an environment fit for life and fit for living."
>
> from Dr. Matt Brennan and Dr. Paul Brandwein, who developed this definition while associated with the Pinchot Institute for Conservation

III. The Need for Environmental Education

Today, unlike just a few years ago, many people are now aware that man, particularly in highly industrialized nations, has driven a long way down the road of contamination and destruction of the very earth on which he depends. Many are the symptoms, and they have been chronicled in innumerable publications.

While in Montana we do not have the severe problems of many states, we do have examples of all of them. And our social, economic, political, and educational structures, attitudes, and actions (which basically are the same as those of the whole nation) have been and still are leading us further along the same blind path. The only reasons Montana is not in as severe difficulty as many states are the shorter period of time since settlement, and the smaller population.

To be specific as to problems, here are a few examples from the Billings area that, as mentioned, illustrate national problems but on a smaller scale.

A. Air pollution.

Air pollution now is of disaster proportions in many parts of the nation. It is a major problem in Missoula. And air pollution is an important problem in Billings, with the refineries, power plant, rendering works, incinerators, home furnaces, cars, and much else contributing.

B. Water problems -- pollution, destruction, and scarcity of good water.

On a national basis, immense difficulties are faced in cleaning the lakes and rivers of untreated sewage from 70,000,000 people, of the thousands of industrial waste materials, of the hundreds of toxic chemicals, and of the millions of tons of silt -- all in an effort to have good water and enough of it. Locally we can show the Yegan Ditch -- an open sewer, the "weeping wall" on the Bench area, the heavily overtaxed sewage treatment plant which gives primary treatment only, Canyon Creek and other streams heavily laden with silt and agricultural chemicals, the annual destruction due to high waters of the rivers, the streams draining feedlots, the storm sewer difficulties, the water rationing, and a host of other water problems.

C. Urbanization, and all its consequences.

In our nation, about 70% of the total population actually lives on about 2% of the land area. For the youth (ages 5-17), 77% of them will be living

in urban areas by 1985. This concentration of people, usually in a totally unplanned manner, creates a host of difficulties. In Montana we have about 5 people per square mile, yet when one considers Billings and Great Falls alone, about 20% of our total population of 700,000 is in those two urban areas. If one adds Helena, Bozeman, Butte, Miles City and perhaps a few more, one finds that even though we think of Montana as a rural state, in truth most Montanans are urban people, with urban experiences and attitudes, and they are faced with urban problems similar to but perhaps not yet as severe as those of heavily populated states.

In Billings, for instance, we have had much concern about the business shift from downtown to the outskirts, the decay of some parts of the city, the intermingling of industrial and residential areas, the traffic and parking problems, the urban sprawl (totally unplanned) on productive agricultural land, the pressures and difficulty of supplying adequate public services (water, sewer, and police and fire protection, to name a few), park development and maintenance, solid waste disposal, and many more.

D. Land Use and competition for use.

Throughout the nation almost no real thought has been exhibited in considering the possible competitive uses of land, or in real long range planning for the most reasonable land use. One can find exceptions, but in the main land use is determined almost entirely by economic factors, by isolated private initiative with few if any public concerns, or by piecemeal or expedient decisions of various levels of government.

In the Billings area we face similar problems, such as a number of haphazard real estate developments giving little thought to needed services or even to health standards, leap-frog urban sprawl westward on the good irrigated farm land, interstate highway construction on that good agricultural land, the continual dilemma of street maintenance and traffic flows, very large areas (as at K-Mart and others) of blacktop and the water runoff as well as esthetic problems they cause, house construction on unstable land (as along the base of the rims and on Mountain View Blvd.), residential and other construction in the flood plain of the Yellowstone River, continual changes of zoning, isolated islands of unannexed industrial land within the city, demands for city services by adjacent non-city areas, development of city parks (we've done fairly well on that), lack of development of county parks, and many more. True, we have a Planning Board,

and some long-range plans are on paper, but both have been quite ineffective thus far in really directing the nature and areas of the growth of the city.

One could cite other problem areas of importance, but the point is that for almost every national problem one names, examples of each are present locally, now. As said before, the only reason they are not more severe than they are at present is that we in Montana just haven't had the time to destroy or degrade to the extent found in older areas. But our attitudes and actions are driving us rapidly along the path followed by many other states.

IV. Root-causes versus symptoms of Environmental Problems.

> "It is evident that some important root causes of our environmental crisis rest in our present consumer and corporate behavioral patterns, our inability to cope with the population dilemma, and the lack of environmental policies that are responsive to an emerging ethic where man is living compatibly with his environment."
>
> Dr. William Stapp, School of Natural Resources, Univ. of Michigan, Ann Arbor, Mich., in a program report for the Kenai Peninsula (Alaska) School Board, July, 1971.

Too frequently in the past as well as in the present we try to solve environmental problems by attacking the symptoms, rather than the causes. For instance, in solid waste disposal, the symptoms of the problem are massive amounts of solid waste. As someone remarked acidly, "We're standing knee-deep in garbage, shooting rockets to the moon." We attack this problem by trying merely to get the solid waste out of sight -- by burning it, or by burying it, or by locating an open dump out of view. We're attacking the symptom. Instead, we need to look at why we have such a large amount of waste. The root causes of the problem, then, are not the waste, but are instead our attitudes and our patterns of action. We have an attitude of prodigal waste; we worship product changes and gadgetry irrespective of whether or not they are improvements; we demand of our industries (and industries through advertising feed and build that demand) ridiculously extravagant use of materials in packaging; we buy on the basis of exterior superficial factors of color or chrome rather than on the quality of the product; we encourage and allow (through our buying habits) industry to build obsolescence into many products; we have great contempt for other people, as shown by our strewing trash widely; and economics as well as apathy have not moved us very far on the critically important matter of recycling of materials.

In similar ways one can show that the root causes of most of our resource and of our environmental problems lie in attitudes, in social customs, and in political apathy to force solutions. For very few problems is it valid that technical knowledge does not exist to solve a problem or at least to make significant progress towards solution.

As a logical extension of these ideas, one realizes that to make significant headway we as a nation need to try to alter (a) individual and consumer attitudes and behavior patterns, (b) corporate and industrial attitudes and behavior patterns, and (c) governmental attitudes and behavior patterns.

V. The Role of the Schools in producing responsible, environmentally literate citizens.

When one examines most modern school curricula, one finds that much "education" is vocationally oriented -- that is, we teach specific knowledge and skills designed to help a person become self-supporting. These are important. However, we pay little attention to the development of critical thinking, problem solving, consideration of raw data, examination or development of alternatives, understanding of cause and effect, identifying issues, evaluating solutions, developing belief and attitudes, building a sense of individual responsibility, becoming sensitive to one's environment, understanding the political process through which citizens may bring change, and developing plans for and carrying out actions aimed at the solution of problems.

These areas just listed offer to schools an exciting, a significant, and a largely-untapped role in education. Were these components to become a part of the schooling process, we would be helping to produce citizens having a motivating concern for and factual knowledge of the relationship and responsibility of man to his environment. Further, those citizens would have the knowledge and skill of how to get at the root of a problem and to move towards a solution.

A significant role of the school system can therefore be to help young people understand their total environment, help them learn (through investigations of problems on their level) how to find out about the essential ingredients of problems, and, lastly, help them develop the attitudes and abilities that lead to responsible citizenship exercised in actions to contribute to solving problems.

VI. The Long-range Goals of the Environmental Education Program of Eastern Montana College and Billings School District #2.

The program of the last five years has made a strong concentration of effort on the sixth grade level. It is but a beginning. In time we would hope that environmental education prevades the curriculum from kindergarten through the 12th grade. The long-range goals stated here are those which we feel should be stated for a student graduating from a Billings high school. Some aspects of present curricula now contribute to reaching some of these goals. Much more could be done. At present, these goals are general guides for us, adapted in part from various sources but particularly from writings of Dr. William Stapp. Our sixth grade program is the place we've started implementation.

A. Overall Goal

Ever since the beginning of this program our overall goals have been to help children --

1. to become knowledgeable concerning their total environment (biological, physical, social, cultural, economic),

2. to become skillful in how to ferret out the significant aspects of a problem or situation,

3. to become sensitive to their own role in and responsibility to developing a productive and liveable environment, and

4. to become motivated to work constructively towards the solution of environmental problems.

B. Components of the Overall Goals.

1. Specific areas of knowledge which are either now in our program or which in time we hope to have in our program:

a. The concept of "space-ship earth" -- a closed system totally dependent on its own resources except for incoming energy from the sun.

b. The concept of biological (natural) ecosystems -- with their interdependent segments, their constant change, and their dependence on and affect on their biological and physical environment.

c. The concept of human ecosystems, and of the cultural, social, political, and economic aspects of them, in addition to the biological and physical aspects listed in (b) above.

d. Concepts of environmental management.

(1) how we carry out and how we depend on the extraction, fabrication, and use of resources.

(2) how we have degraded the environment.

(3) how we must find ways to build a quality environment while at the same time we enjoy the use of the resources.

e. Concepts of our cultural institutions.

(1) Information on population problems.

(2) Understanding of our social, economic, and political structures, of how they work, of how they interact, and of how the individual may responsibly act to alter and improve the effectiveness of those structures and systems.

2. Specific areas of attitude development.

a. Assist teachers and pupils in developing a concern for and a sensitivity to the quality of the environment, both natural and man-made.

b. Develop a sense of individual responsibility.

c. Foster the growth of a desire -- a motivation -- to help resolve environmental problems.

3. Specific areas of skill development.

a. Develop in teachers and pupils investigatory skills involving critical thinking through:

(1) identifying and defining a problem.

(2) collecting information about the problem.

(3) evaluating that information as to validity, relevance, bias, emotionalism, and accuracy.

(4) devising experiments, studies, or investigations, collecting data, and properly using those data to draw conclusions or to make sound generalizations.

b. Develop action skills in problem solving through:

(1) using the results of the investigating skills.

(2) becoming well informed.

(3) developing and stating alternatives.

(4) devising a plan of action.

(5) putting that plan of action into operation, to contribute towards achieving the desired change.

VII. Specific Goals of the EMC/District Environmental Education program, as applied thus far to sixth-grade youngsters.

While the statement of overall goals and of the components of them are part of the general philosophy under which our program operates, we obviously cannot and should not drown the sixth graders by trying to carry them the whole way. Those broad goals apply to a total environmental education program (K through 12 or probably K through 16). In the elementary grades the major emphasis is on helping children to <u>discover</u> facts and interrelationships, with as much "doing" and experimentation as possible.

To this end, and for the sixth grade program, the specific objectives are these (with added comments in parentheses of program ingredients that endeavor to meet each objective):

A. Develop in the children --

1. an understanding of the major biological and physical factors of ecosystems, both natural and man-made. (Studies of such ecosystems are part of the program.)

2. skill in measuring and observing those factors. (In their studies of ecosystems the children do experiments, make observations, and measure factors of ecosystems.)

3. ability in collecting and recording data about environments. (These the children do in their studies.)

4. ability in drawing logical conclusions from the experiments, the field and classroom studies, and the compiled data. (To some extent the children do this.)

5. skill in devising and carrying out investigations of problem areas, with some evident action or followup that is within the powers of the children to perform. (This objective has not been realized to much of a degree, but it still is one we hope to reach.)

6. a greater sensitivity to the nature and quality of the world around them.

B. Carry out teacher training workshops or courses (in-service and pre-service) to prepare teachers with the attitudes and skills of environmental education suitable for their grade level. (There have been five formal workshops and two informal ones.)

C. Train college students in many aspects of camp counsellorship. (Three of these courses have been carried out.)

D. Train college students as "backup instructors" for the camp program and for the pre-camp schoolroom activities. (One formal special program has been carried out to do this job.)

VIII. Curriculum, Instructional, and Activity Components of the EMC/District Environmental Education Program for Sixth Graders

A. Teacher Training

1. Background, and statistics summary.

A program of this nature depends absolutely on the ability of the teachers to guide students towards achieving the specific goals.

In the first year of the program (spring 1967) the college staff spent some time with the one classroom of children, in conducting local (school ground) observation tours, and in helping the teacher. Subsequently the staff carried out the first camp program for 29 children of the EMC Campus School.

In the second season (spring 1968), the two teachers involved were helped in somewhat the same manner as in Spring 1967. The camp program then involved 52 children from 2 classrooms (one from Taft and one from EMC Campus School).

In the third season (spring 1969), which involved 192 children, we set up the first formal credit-granting teacher workshop designed specifically for this program. There have been workshops spring 1969, fall 1969, spring 1970, fall 1970, and spring 1971.

In these five formal credit-granting workshops we have had 116 teachers, and 122 EMC education students; for a total of 238. We encouraged

college student participation in these workshops in order to develop a pool of students that could be used as camp counsellors. Subsequently several camp counsellor training courses were offered, and are described in VIII B below.

The complete tabulation of courses and attendance is given on Table I of Appendix A. In Table II of Appendix A is a record of the Billings principals and teachers who were employed in the Billings District #2 system in the year 1970-1971, and who had taken the Environmental Education Workshop at one time or another.

2. Content of the workshops.

As in any program, so with this one: the training program gradually evolved from year to year. The workshop content for spring 1971 is given in Appendix B, as described in the material issued to the teachers in their first session. The workshop involved five evening sessions of two to two and one-half hours each, plus one Saturday session, plus a two-day experience (7:00 a.m. Saturday to 3:00 p.m. Sunday) at the Lions Camp at Red Lodge.

The evening sessions largely involved the students of the workshop in investigation methods on environmental factors and problems, plus some information and discussion on camp management factors, social arrangements (sociograms) for the children when at camp and, of course, general philosophy. For many of the exercises and investigations the workshop students were issued various materials.

The Saturday session, held on the seemingly educationally sterile grounds of the Taft School, emphasized, demonstrated, and gave the students practice in seeing and using some of the many opportunities to be found on or near <u>any</u> school grounds -- including those with large asphalt areas.

The two-day camp session carried the workshop students through the same basic instructional and investigation program the children subsequently would experience.

B. Camp Counsellor Training.

The camp aspects of the children's program would have been impossible to carry out without the help of many EMC students. In the first two camp sessions (spring 1967, spring 1968) the numbers of children were respectively 29 and 52 children, and we recruited interested students but gave them no special training.

For the spring 1969 program we used EMC students who had participated in the first formal credit-granting workshop, or in either of the first two camp programs of 1967 and 1968. Then, for the spring 1970 program a camp counsellor course was put into operation, and students from that plus from the Environmental Education Workshops gave us the assistance needed to handle the some 480 children. For handling the some 900 children of the spring 1971 camp session, in both winter quarter and spring quarter Counsellor Training Courses were offered, and 134 EMC students were in them. They, plus EMC students from previous workshops and courses, gave us the approximately 170 students that helped in one way or another with the spring 1971 children's camp program. The statistics on these Counsellor Training Courses are included in Table I of Appendix A.

C. Backup Instructors Training.

For the spring 1971 program, we in early February recruited 12 interested and experienced EMC students who had been heavily involved in the program of one or more of the previous years. From February on, we considered those students part of the camp's instructional and managerial staff, and all of them carried out many pre-camp planning and operational assignments in cooperation with the non-student staff -- such as detailed planning and contact relative to all bus transportation, detailed planning of each of the nine sessions of the sixth-graders, and camp opening work. Then, during the children's sessions, these students played a major instructional role with the children. In fact, between these students plus some of the workshop teachers, the Eastern faculty members were partially freed of instructional duties at the children's camp sessions, and could better meet their continual obligations at the college.

A list of the program faculty plus a list of these "Backup Instructor" students is given in Appendix B, in the material issued to the teachers at the first meeting of the Workshop.

D. Pre-Camp preparation of the sixth grade children.

A significant aspect of this program is that no classroom of children could participate in the camp program unless their teacher had taken one of the Environmental Education Workshops. In many instances, the principal also had taken the workshop. Although this was not a requirement, it was of great help in the success of the program. The teacher and the principal are the keys. What goes on <u>before</u> the camp experience is more important than the camp experience

itself. We have always felt that if the EMC/District program consisted only of the two-day camp experience, it would not have any lasting effect. Therefore we encourage and aid the teachers to carry out various in-classroom and on-school-grounds activities and investigations before the children come to camp. The most effort and the most success has been with studies of ecosystems. As a result, most of the children arrive at camp with a surprisingly good basic concept of and experience with simple environmental systems. They are aware of many of the key factors -- physical, chemical, and biological. As a result, the field instruction and studies at the camp are able to operate on a higher and more sophisticated level than they would if the children had not had such pre-camp experiences.

The pre-camp segment of the total program does, however, need more formal organization, help, and direction, and we're planning on offering this in the future.

E. Content of the Camp Sessions for the Sixth-grade Children.

In Appendix C is the detailed program of the children's sessions of the spring 1971 program. The programs of all nine sessions were the same.

1. Field Instruction and Investigations.

The children are actually at the camp approximately 48 hours (from about 7:00 p.m. of one day to about 7:00 p.m. two days later). In that time they receive about 10 hours of field instruction, in four different instructional areas through which the children rotate. These four subject areas are briefly described below:

(a) Ecosystems studies.

(1) Ecology of a stream. The children carry out collections, observations, and measurements of a stream, followed by a discussion of factors of an aquatic habitat and conclusions of the level of and reasons for the particular productivity found.

(2) Ecology of a small area of land. A transect study is carried out, with emphasis on the kinds and densities of plants, and speculations on the reasons for the several different environments discovered.

(b) Geological studies.

The children collect, examine, test, and classify various kinds of rocks. They discuss the origins of the rocks, then study the overall geologic nature of the local valley, and the many geologic forces at work. And these geologic aspects are then related to man and his use of the land.

(c) Geographic studies.

(1) The children have an opportunity to see and to use various weather instruments, and to compile weather data charts.

(2) Spacial and directional concepts are explored, through the uses of compasses, pacing, very simple surveying and mapping tools, creation of simple maps, and discussions of the influence of geographic factors on man's history and present land use.

(d) Plot studies (studies of environmental factors of land).

In this unit the children (in groups of 3 or 4) actually carry out a detailed study of a small (3 ft. X 3 ft.) plot of ground. They (1) map the plant cover, (2) map the animals or animal signs, (3) determine elevation change, (4) stake out contour lines, (5) measure slopes, (6) measure surface and subsurface temperatures, (7) measure soil compactness, (8) measure soil permeability to water, (9) expose and map a small soil profile, (10) carry out a simple particle-density analysis of the soil which yields its percent composition, (11) record all these data on their maps, and (12) discuss throughout the investigation the significance of the several factors to the plants and animals of that tiny area and the significance of those factors (on a broader scale) to man.

2. Other instructional components.

(a) First Aid

Each of the children's sessions had a medical doctor in camp at all times. The doctor for each session put on two first-aid instructional sessions, and every child attends one or the other. The doctors have done an outstanding job of demonstration, discussion, and communication with the children, and on their level.

(b) Art

For the spring 1971 session, Dr. Helene Northcutt of the EMC Art Department, using a class of her advanced students, had at least two art students assigned to each of the children's sessions. Each child had one hour of creative art experience, and an additional period (in free time) for completing projects. The art instruction in spring 1971 was well-organized, well-staffed, well-run, and successful.

3. Recreation

Various blocks of time in the children's camp program were for "free time," during which numerous recreational activities occurred (baseball, volleyball, hiking, and others) on an optional basis. For these periods, EMC students were in charge who were in camp as counsellors and who had Physical Education training. The Health, Physical Education, and Recreation Department of EMC was most cooperative in helping make arrangements and in manning those activity periods.

4. Music and dramatics.

While in previous years the camp sessions have had the services of music instructors from District #2, in the spring 1971 program the planning and presentation of the evening campfire programs were assigned to each teacher whose classroom was in attendance. In most instances the teacher and the children had planned and rehearsed their contribution before coming to camp, and had made it part of the in-classroom pre-camp music and creative dramatics program in their school. Those evening programs were very enjoyable for all concerned, and added significantly to the spirit and success of the total camp program.

IX. Evaluation of the Instructional Components.

Evaluation of any program is essential, particularly in relation to the stated specific objectives (see Item VII). In this program we have met the objectives of teacher and of college student training (Objectives B, C, and D), and have used post-session evaluation forms for the workshops, which indicate a high degree of teacher approval and acceptance. (See Appendix G for several such evaluations.)

For the objective A, dealing with the children's growth in understanding, in sensitivity, and in various skills, we have not used specific evaluating tools, such as pre-tests/post-tests. This is an omission we hope to correct. We do get

enthusiastic "feedback" from many parents and children, and the fact that a number of school Parent Teacher Associations have repeatedly assumed and met the financial obligations seems to indicate strong parental acceptance of the children's pre-camp and in-camp program.

X. Camp Management Components

The camp management aspects of the Environmental Education Program are many and varied, and are of critical importance in creating a learning atmosphere for the instructional portion of the camp program (see section VIII E above).

A. General Organization.

Each camp session was managed by a Director. He was in overall charge of the session. Responsible to him were the kitchen staff, the instructional staff, and the tutor-counsellors of that session.

B. Specific Duties.

1. The Director of each session was the general manager and coordinator of all aspects of his sessions. His jobs are many, and involve much planning and detail. He must arrange for transportation, food, lodging, insurance, camp cleanup, fuel, and a thousand other things. And he must account for and have the overall responsibility for the children, to include their being present at their instructional sessions and their general well-being.

2. The Instructional staff operated as described in VIII E above, and according to the schedule shown in Appendix C.

3. Tutor-Counsellors

a. Well oriented and capable tutor-counsellors are essential. They have an opportunity to do a great service to the boys and girls participating in the program. Unless they accept the job in this light they will be doing an injustice both to the children and themselves. At the camp sessions, every tutor counsellor had taken either or both of the training sessions (E.E. Workshop, or Camp Counsellor training Course. See VIII A and B). And for each session we had one tutor counsellor for each six or seven children, plus some extras assigned to other duties.

b. Basically the tutor-counsellor is accepting a challenge to help in the wholesome development of the campers under his direction. Naturally, we

recognize that every child should enjoy fully his stay at camp. However, the tutor-counsellor should consider a child's needs more deeply than just having a good time. In order to help in this development process, the tutor-counsellor should try to understand some of the basic needs o' all children. The following are needs which every child has and that must be met in some measure to ensure a well rounded life.

(1) The need to feel that he is liked and accepted by others.

(2) The need to feel a successful "Sense of accomplishment." In other words, to feel he has done something worthwhile.

(3) The need for healthful physical development through proper exercise, nutrition, and hygienic living habits.

(4) The need to learn useful recreational and practiced skills; to develop appreciation and enjoyment of camping skills, nature craft hobbies, hiking, etc.

(5) The need to develop a sound attitude toward his companions; to understand and accept a creed of tolerance, fair play, unselfishness, and above all, a clear concept of the Golden Rule.

c. The tutor-counsellor's major responsibility is directed to the over-all development of the children. More specifically, each tutor-counsellor should keep the following areas of responsibility in mind. His dependability in consistently carrying them out will have a large bearing on the success of the outdoor education experience.

(1) Appearance

Appearance should be neat and clean in person and dress. How else can we impress the values of personal hygiene to the campers?

(2) Setting Example

Setting an example in all of his personal behavior. The Leader cannot "lead" who does not do so by example. The tutor-counsellors' manners and eating habits are certain to set the pattern for his cabin at the table. His example with his own bunk and personal possessions in the cabin will set the expectancy for tidiness. His observance of camp rules such as camp boundaries, will be closely observed by the children. His language will be reflected by impressionable youngsters!

(3) Doing More Than Your Share

His readiness to do his share and a little more in all camp

tasks is very desirable. One of the finest things that can be said about a leader is that "He is always willing to do more than his share". There is always plenty to do in a camp which might be easier to avoid. In addition to obvious tasks associated with camp clean up, there are always tasks around camp which need some willing hands.

(4) Camp Routine

The tutor-counsellor has a constant responsibility to aid in the smooth running of camp daily routine and program. Being on time is imperative. Success of the program depends upon getting things done on time. Tutor-counsellors should always be at each activity or gathering ahead of time, after first being sure that their campers are accounted for.

(5) Assignments

In addition to his cabin group, each tutor-counsellor has other assignments assisting with the camp program. Each tutor-counsellor should accept his role in the program seriously. He must prepare ahead of time so that his part of the program will be a success. A schedule of Kampus Kapers is used to designate duties at camp. The camp director designates the duties.

d. Cabin Assignments. Cabin assignments are made with the best interests of the students in mind. This is best accomplished by utilization of a sociogram, and these are made by the classroom teacher in cooperation with an EMC faculty member (Dr. Grilley). It is essential that a student is not assigned a cabin with another student whom he has indicated he does not wish to have in his cabin. It is also important to assign a student to a cabin with at least one of his friends. If these simple rules can be adhered to in making cabin assignments, the camp will be more enjoyable for the students.

e. Cabin Clean-Up. In order to be democratic the tutor-counsellors should let the students help make the rules in regard to the cleanliness of the cabin and area. However, the following rules are essential:

(1) All clothes in cabinets to be neatly folded. Keep your cabinet neat.

(2) Soiled clothing may be kept in a laundry bag, or suitcase.

(3) Jackets and hats should be hung up neatly.

(4) Shoes placed side by side uniformly in cabin.

(5) All personal equipment such as soap, toothbrush, comb, flashlight, pocket knife, craft supplies, etc., are to be kept in a cabinet or suitcase -- not hidden under a sleeping bag or elsewhere.

(6) Bunks, sleeping bags and suitcases dusted and neat.

(7) Floor and porch swept.

(8) All papers and anything which is not a part of nature should be picked up from within a twenty-five foot radius of cabin. THE MOST IMPORTANT PART OF A CHILD'S CABIN CLEAN-UP TAKES IN KEEPING HIS OWN BUNK AND PERSONAL POSSESSIONS NEAT AND CLEAN AT ALL TIMES!!!

f. Mess Procedures. The dining hall has three main functions:

-- To provide nourishing and well-balanced meals.
-- To teach socially acceptable meal time behavior.
-- To help children learn to appreciate and enjoy food.

The meal time procedure is as follows:

(1) When children arrive at the table, all stand behind their chairs to sing grace.

(2) Good posture for all present is expected.

(3) Each table of children will line up for food when the camp director signals. The camp director designates the order in which the groups line up.

(4) Children are allowed plenty to eat, but they are expected to eat all they take.

(5) No one eats until all are served and seated at their respective tables.

(6) Tutor counsellors are expected to be seated with their assigned groups.

(7) Tutor counsellors will set the example for the proper use of the eating tools, use of napkin, and pleasant conversation. Students are expected to follow.

(8) Second are allowed after everyone has had their first serving and upon direction from the cooks.

(9) When children have finished eating, they remain seated until all or nearly all others have finished.

(10) Normally each table is responsible for their own dishes. The cooks will demonstrate the method for washing dishes and storing garbage.

g. Camp Physician.

A medical doctor is present for those who become sick or need special medication. Up to this point doctors from the City of Billings have very graciously given their time for the success of this program. In the 1970-71 program, eight medical doctors contributed their time, and one of them covered two sessions.

Sick call is normally held between 8:00 and 9:00 a.m. in the morning. However, a medical doctor is always on hand should an emergency arise. The medical doctor also gives the first-aid instruction as a regular part of the program.

XI. Financial Components

This EMC/District Environmental Education Program is a unique one in many ways. And one of its most unique features is its manner of funding.

For the five years of the program it has had no Federal money, no State money, no District money, and no College money specifically budgeted to the program. Financing has been met by the Parent-Teacher Associations of the participating schools. Theyhave held many fund raising activities to meet the charge per child. In addition, numerous classrooms of children have carried on their own fund raising endeavors such as hot-dog lunches, donuts and coffee at a few polling places, and so on.

In each participating school the PTA has raised the money, or gotten the parents to pledge the money for their children, or a combination of these. In no case was a child unable to go merely for the lack of the money.

This remarkable and sustained effort by the PTA's is a tribute to them and to their belief in the program. However, this arrangement cannot, of course, continue indefinitely, and stable, District-wide funding will be necessary for the program to grow.

A table of financial data is given in Appendix E.

XII. Conclusion

This program, a local boot-strap operation, has been successful and has been growing rapidly for the last five years. We are now at the point of needing to

assess where the program is to go from here. However, that speculation is not part of this report. The Program Staff has discussed various ideas with a number of key people, but it would be premature to include them here.

Persons interested in discussing any aspect of the Billings Environmental Education Program, or in receiving further copies of this report, need only contact one of the co-authors of the report and co-directors of the program -- either Professor Erick Erickson or Dr. Wilson F. Clark.

Addendum to this report.

Since the preparation of this report for the Billings District #2 School Board in August of 1971, the following developments have occurred:

1. The School Administration has formally confirmed the designation of Mr. Ed Heiser (on the Central Administration Staff) as Coordinator of Environmental Education.

2. The School Administration has made plans for continuing the program in 1971-72, and plans to add one or two more elementary schools to the 12 schools involved in the 1971 program. This year's financing (1971-72) will still rely heavily on the PTA financing.

3. Furthermore, the School Administration hopes to expand the program to include all of the over 1500 sixth graders, through appropriate budget planning for 1972-73.

4. The School of Education and the School of Liberal Arts at Eastern Montana College have agreed to continue the in-service teacher workshops in Environmental Education, and continue the recruitment and training of college students for the program and as part of those students' preparation to become teachers.

5. This fall a specific "Environmental Education Concentration" option for college students training to become elementary teachers has been accepted by the several college committees, and will appear in our next catalog.

6. The Division of Science and Mathematics of the School of Liberal Arts is drastically revising its several beginning science courses to create a realistic, process-approach and discovery-oriented sequence for elementary education majors. This move is supportive of and influenced by the successful and existing environmental education program.

7. Copies of the August 9, 1971 report on our Environmental Education Program have been sent out to about twenty places, based on written requests or on verbal requests received at various conferences. Among these are the State Department of Education in Alaska, the Environmental Education Office of the U.S. Forest Service in the Portland, Oregon, Regional Office, the Great Falls, Montana, School District, the Director of Conservation Education for Wisconsin, the Ferguson Publishing Company, the School of Natural Resources of the University of Michigan in Ann Arbor, and quite a few more.

8. And lastly, this fall the Environmental Education faculty of the two Schools of the College carried the Environmental Education Workshop as an extension course to Glendive, Montana (230 miles east of Billings). Statements of the general evaluation of that workshop have been added at the end of Appendix G.

Table I

Summary of Environmental Education
Training Workshops

Quarter	Course #	Env. Ed. Workshops		Counsellor Training Workshops
	(Note 1)	# Undergrads Students	# Grad Students (Note 2)	# Students
Spring 1969	Ed 493	14		
	Ed 593		34	
	Sc 302-2	17		
	Ed 491	2		
Fall 1969	Ed 493	1	26	
Spring 1970	Ed 493	1	21	
	Ed 493			45
Fall 1970	Ed 493	48	12	
	Ed 491	2		
Winter 1971	Ed 290			67
	Ed 493			42
Spring 1971	Ed 493	29		
	Ed 593		23	
	Sc 493	4		
	Ed 490	4		
	Ed 290			25
		122	116	179

Notes: 1. The variety of course numbers is not significant.
2. All in this column received graduate credit.

Table II

Summary of Billings Public Schools, and Record of Teachers on contract 1970-71 who had at some time taken the Environmental Education Workshop

Name of the School (all data are for 1970-71 School Year)	Total # of Teachers and Admin.	Total # who had an E.E. Workshop	Total # of 6th grade rooms	# of 6th grade rooms at Camp S '71	Total # children at camp S '71	Total # Teachers at camp S '71	Principal has taken E.E. Wksp.
ementary Schools							
ench	13	2	2	--	--	--	no
itterroot	21	6	3	3	89	3	no
oulder	19	3	3	3	95	3	no
oadwater	21	5	3	--	--	--	yes
rlington	20	2	3	--	--	--	yes
ntral Heights	20	5	4	4	99	3	yes
stern Elementary	11	3	1	1	30	1	yes
rfield	28	2	1	--	--	--	no
and	16	5	5	5	134	5	no
ghland	17	4	4	4	98	3	yes
Kinley	13	1	2	--	--	--	no
adowlark	20	4	1	1	22	1	yes
les Avenue	21	4	0	--	--	--	yes
wman	16	3	2	2	62	2	no
rth Park	16	2	2	--	--	--	no
chard	12	3	2	--	--	--	no
ly Drive	19	4	3	3	93	3	no
nderosa	19	5	3	--	--	--	no
nrock	13	5	3	3	74	3	yes
cky Elementary	5	1	0	--	--	--	no
se Park	19	7	3	3	68	3	yes
iloh	4	1	0	--	--	--	--
Ft	13	4	1+	1+	38	2	yes
shington	20	2	3	--	--	--	yes
ls for Elementary Schools	395	83	54	33	902	32	11 of the 24 are yes

rs	Total # Teachers & Admin.	# who have had an E.E. Wksp
tral Admin. Offices	53	4
lings Senior High	104	2
lings West High	115	0
is & Clark Junior High	79	2
coln Junior High	70	1
erside Junior High	49	0
Tech Center	16	0
l James Junior High	50	3
	536	12

Spring 1971

Info Sheet for Environmental Education Program

Roster of Staff

March 1971

Staff Member, Address, Phone	Teaching Assignment (group 1,2,3, or 4)	Special Planning Assignment
rof. Elmer Andersen, EMC, 657-2344	Geography Unit (1)	- Teacher Units
r. Mike Chapman, 25 Avenue B, 259-6292	*Clark Backup (4)	- Time Sched.
r. Wilson Clark, EMC, 657-2344	Plot Study (4) and Workshop Director	- Time Sched.
r. Randy Coley, 723 Cook Ave. 248-8073	*Andersen Backup (1)	- Food Serv. Coord.
iss Sue Dunbar, 845 Wicks Lane, 259-1400	*Schoenthal Backup (2)	- Publicity
rof. Erick Erickson, EMC, 657-2210	Camp Director	- Overall
r. Dick Fick, Taft School, 259-4144 -- and 3534 Old Hardin Rd., 252-4318	Mares/Grant Backup (3)	- Teacher Units
r. Dan Fletcher, 1921 10th Ave N, 252-4705	*Mares/Grant Backup (3)	- Opening Camp
rof. Roland Grant, EMC, 657-2344	Geology Unit (3)	- Teacher Units
r. Helen Grilley, EMC, 657-2167	Planning & Sociograms	- General planning
r. Ed Heiser, Principal, Rose Park School, 259-8771, and 1404 Cook Ave., 259-7116	Ass't Camp Director	- Overall
r. Jim Hicks, Blue Creek Route, 259-0638	*Andersen Backup (1)	- Opening Camp
r. Dave Kirkness, 2303 Hewitt, 656-7430	*Clark Backup (4)	- Time Sched.
r. Rick Klaboe, 315 Apsaruke Hall, EMC, 657-2606	*Geology Unit (3)	- Opening Camp
r. Tim Mares, Principal, Taft School, 259-4144, and 5412 Gene Sarazen Dr., 656-3784	Geology Unit (3)	- Teacher Units
r. Charles Reed, EMC Elem School, 657-2210 -- and 1048 Parkhill, 259-1979	Ass't to Erickson	- General
r. Norm Schoenthal, EMC, 657-2344	Ecology Unit (2)	- Teacher Units
r. Doug Shenkle, 516½ Miles Ave., 259-0698	*Schoenthal Backup (2)	- Transportation
r. Clarence Stenberg, 1070 Judith Lane, 252-0478	*Andersen Backup (1)	- Opening Camp
r. Jim Strickland,	*Schoenthal Backup (2)	- Publicity
r. Bob Thompson, 1415 Avenue B, 259-7254	*Clark Backup (4)	- Transportation
r. Paul Crellin, 1230 North 28 Street	Med. Dr. Coordinator	- M.D.'s
r. Helene Northcutt, EMC	Art Coordinator	- Art Program
EMC Students		

Spring 1971

Teachers' Workshop in Environmental Education

Introductory Information

Background, Objectives, Unifying Concepts

A. Background

This spring is the fifth year of the Environmental Education Program in Billings. This spring's Teachers' Workshop is the eighth of its kind to be offered. It is designed to help teachers become able to work in and with the rapidly expanding Environmental Education program in the public schools.

Immediately following this Workshop this spring, about 900 sixth graders from District #2 will each have a two-day camp experience, with solid field instruction in Environmental Education. Teachers of those sixth grade rooms selected for this spring have all had or will have had the Environmental Education Workshop, and will work with the workshop staff at camp when the children are at camp.

B. What the Workshop strives to do: (For full statement of objectives see Philosophy and Objectives handout)

The objectives of this Workshop are these:

1. to help teachers become aware of the environmental problems we face.
2. to help them understand the challenge, responsibilities, and opportunities of Environmental Education for all grade levels.
3. to present fundamental information on basic resources and on man's handling of those resources.
4. to give practical illustrations of and actual experience with activities and studies which will contribute to a child's understanding of his environment and his relationship to it.
5. and to learn how to use the Process Approach as a strong learning tool utilizing a maximum of actual student participation.

C. Unifying Concepts

Throughout this Workshop, and throughout a teacher's efforts in Environmental Education there are some simple yet absolutely fundamental unifying concepts. These are as follows, and should be kept in mind constantly:

1. Living things are interdependent with one another and with their environment.
2. All organisms or populations of organisms are the product of their heredity and of their environment.
3. All organisms and environments are in constant change.

Spring 1971

Teachers' Workshop in Environmental Education

Info Sheet #1

Registration Information

A. Course Information

Course Title to use in registration: Env. Ed. Workshop for Teachers

Course Number: Ed 493 (for those without a B.S. or B.A. degree -- all undergraduates)

Course Credit: 3 credits

Pre-requisite: none

B. Registration Information (be sure you use the correct category)

1. For undergraduates who now (Spring 1971) are already registered as EMC students

   File an Add Card with Dr. Clark, then pay fees as in C below.

2. For graduate (post-bachelors degree) students who have previously attended EMC at any time.

   File a pink "Re-admission" card, and pay fee below.

3. For graduate (post-bachelors degree) students who have never attended EMC.

   File the completed Application for Admission, and pay fees below. The usual $10 fee for first admission to EMC is NOT charged for this type of admission.

C. Fees

	Instructional Fee	May 8, 9 Field Camp Fee	Total
(a) For students not now (Spring 1971) full time EMC students	57.00	15.00	72.00
(b) For students who now (Spring 1971) are full-time EMC students	0.00	15.00	15.00

Make the $57.00 check payable to Eastern Montana College.

Make the $15.00 check payable to Env. Ed. Camp Acct., EMC.

D. Class Card

Your add card or admission documents will be turned in to the Registrar's Office. Packets will be made up, and ready for the second session. At the second session you will fill out the packet cards, and the class card will be inserted. For students using the Add Card, be sure this card is turned in to Dr. Clark -- not to the Registrar's Office, and he will then deliver it plus a class card to the Registrar.

Spring 1971

Teachers' Workshop in Environmental Education

Info Sheet #2

Time Schedule

Thursday, March 25 -- 7:30 p.m. - 9:30 p.m.
Multipurpose Room, EMC
(a) Course Registration; (b) Introductory Comments -- Clark,
(c) Film and Discussion -- Grilley, (d) the Discovery/Inquiry Method -- Clark

Thursday, April 1 -- 7:00 p.m. - 9:00 p.m.
Multipurpose Room, EMC
Schoenthal in charge. Basic concepts in Ecology.
Simple tools, studies, experiments for exploring ecosystems -- natural and manmade.

Thursday, April 8 -- 7:00 p.m. - 9:00 p.m.
Multipurpose Room, EMC
Clark in charge. Soil, sir, and water -- the basis of all life.
Simple tools, studies, experiments for exploring the ground.

Thursday, April 15 -- 7:00 p m. - 9:00 p.m.
Multipurpose Room, EMC
Andersen, Mares, Grant in charge.
Simple tools, studies, experiments for exploring the geological, geographic, and climatic factors as they affect natural or man-made ecosystems and man's use of the land and its resources.

Thursday, April 22 -- NOT A CLASS SESSION. This is for staff only, as a final planning session for the April 24 field day. Staff is to meet at Taft School at 7:00 p.m.

Saturday, April 24 -- 8:30 a.m. to 3:30 p.m.
All day field trip, entirely within the environs of Billings.
This will be held regardless of the weather (even snow). Come dressed properly for the weather and for the field.
Bring your own lunch. Hot coffee will be supplied.
Adequate rest stops will be provided.
This is a trip by bus. MEET at 8:15 a.m., in parking lot south of the EMC Campus School.

Thursday, April 29 -- 7:00 p.m. - 9:00 p.m.
Multipurpose Room, EMC
Erickson, Heiser, Grilley in charge.
Implementing an environmental education program.
Aspects of planning, curricula, management.

Saturday, May 8 and Sunday, May 9 -- Field Weekend
ALL are to be at the Lion's Camp, outside of Red Lodge, by 7:00 a.m., on Saturday for breakfast and the basic information on the Field Session, and to stay through to the end of the field session about 3:30 p.m. on Sunday. Full information (program, equipment, etc.) will be issued in a subsequent Info Sheet.

Spring 1971

Teachers' Workshop in Environmental Education

Info Sheet #3

The Basis of Grading

We are unfortunately required to assign grades to all teachers and students taking this Workshop for credit. In the past we've tried various devices, such as the unit studies, some examinations, various papers, and so on. Those methods have been somewhat criticized by the students, and justifiably.

This session, the major emphasis of each session will be on individual student participation, at every session. We plan to involve everyone actively, with feedback to us in the form of the experiments, observations, interpretations, ideas, notes, and other things generated in each session.

To this end, and so that there will be no confusion, the following basis of grading has been jointly set up by the staff -- including the backup staff, all of whom recently have been through a teacher workshop. (Note that there are no blanket or automatic grades.)

Maximum grade of C -- may miss no more than two of the evening sessions, but must attend the April 24 field trip and the May 8, 9 field camp. Must fully participate in all sessions attended.

Maximum grade of B -- Full attendance (at all sessions), and full participation as determined by the instructors.

Maximum grade of A -- Full attendance (at all sessions) and full participation as determined by the instructors, plus satisfactory completion of one of the following three alternatives

(1) Problem in applying Env. Ed. to a school situation.

or (2) A professional paper dealing with Env. Ed.

or (3) Teaching units covering three areas.

For these three alternatives, specific guidelines and criteria of acceptability will be issued by, respectively, (1) Clark, (2) Grilley, and (3) Schoenthal. Each final paper shall be read and judged by no less than three of the faculty. To be accepted, all papers must be turned in to Dr. Clark's office (room 103, 105, Science Building, EMC) on or before May 20. Course grades will be issued by at least the end of the quarter.

Spring 1971

Teachers' Workshop in Environmental Education

Info Sheet #4

PROGRAM of the RED LODGE FIELD SESSIONS

Objective: to have each person experience and understand the field program that the sixth grade children go through.

aturday, May 8

Be at the Lions Camp, south of Red Lodge, by 7:00 a.m.

:15 a.m.	Breakfast. Then get settled in a cabin.
:15	Total group will be broken into four smaller groups. See group assignments of General Info Sheet #5.
30 - 11:00	Group A - Schoenthal Group B - Andersen Group C - Mares and Grant Group D - Clark (groups can take a coffee break in the middle)
:15	Lunch
:00 - 2:30 p.m.	Group B - Schoenthal Group C - Andersen Group D - Mares and Grant Group A - Clark
30	Coffee Break
00 - 5:30	Group C - Schoenthal Group D - Andersen Group A - Mares and Grant Group B - Clark
30 - 6:30	Free time. Chance to examine publications on display.
30	Dinner
45	Assembly Hall
	Discussion of other aspects of environmental education, of camp management, of the place of such programs in schools. Full faculty.
45	Fun time. Dance

nday, May 9

45	Rising bell.
5 a.m.	Breakfast
5 - 10:45	Field Sessions Group D - Schoenthal Group A - Andersen Group B - Mares and Grant Group C - Clark
00 - 11:45	Non-denominational Church Service -- Pastor John Lee
00	Lunch
30 - 1:00	Pack up gear and load your cars. Sweep out cabins; clean washrooms.
5	Meet at Assembly Hall Final session. Evaluation Awarding of Certificates
	End of camp session

Session # 1
Page 1

Environmental Education Program, Spring 1971

Billings District #2 and Eastern Montana College

Session # 1 , on Monday , May 10 , and Tuesday , May 11 .

School: Highland ,
Principal: Brinkman , Teacher Pike , # children 26 (boys 11 , girls 15)

School: Rose Park ,
Principal: Heiser , Teacher Frank Dell , # children 22 (boys 11 , girls 11)

School: Eastern ,
Principal: Erickson , Teacher Reed , # children 30 (boys 19 , girls 11)

School: Meadowlark ,
Principal: Wilson , Teacher Wilson , # children 22 (boys 10 , girls 12)

Totals -------- 100 (boys 51 , girls 49)

Director for this session: Erick Erickson . Medical Doctor for this session: Dr. Crellin

Travel to camp.

On Sunday , May 9 , children are to have supper at home, and be at their own school by 5:00 p.m., with all their equipment. Teachers and some counsellors will ride the buses with the children. Each item (sleeping bag, suitcase, etc.) is to bear a tag with the child's name, school, and session number.

Buses arrive at Camp about 7:00 p.m. Unload at Assembly Hall.
Cabin assignments. Get settled. Brief campfire program.
Cocoa and snack served.
Lights out at 9:30 p.m.

Monday , May 10

:00 a.m.	Roll out of bed
:30	Breakfast and Cabin Duty
:00 - 8:30	Kamp Kapers (cleanup)
:30 - 8:45	Orientation, and short inspirational program
:50 - 11:10	Field Instructional Groups

Group A - Geographic studies -- Jim Hicks, Robert Wilson
Group B - Geologic studies ---- Dan Fletcher, Prof. Grant, Frank Dell
Group C - Ecologic studies ---- Charles Reed, Dr. Schoenthal, Jerry Pike
Group D - Plot studies -------- Mike Chapman, Dr. Clark, Dave Kirkness

1:15 - 12:00	Arts and Crafts -- Dr. Helen Northcutt, Vicki Berentson (group A, B)
	First Aid Instruction -- Dr. Crellin (group C, D)
2:00 noon	Cleanup for lunch
2:15 - 1:30	Lunch, Kamp Kapers, cleanup and a bit of free time.
:30 - 3:45	Instructional Groups

Group B - Geographic studies -- Jim Hicks, Robert Wilson
Group C - Geologic studies ---- Dan Fletcher, Prof. Grant, Frank Dell
Group D - Ecologic studies ---- Charles Reed, Dr. Schoenthal, Jerry Pike
Group A - Plot studies -------- Mike Chapman, Dr. Clark

Session # 1
Page 2

4:00 - 6:00 Free time and Recreation. Write letters. Hike with a counsellor.
Complete Art work (group A & B only) started this morning.
Dr. Northcutt, Vicki Berentson overnite: Lynette Loran
Phyllis Ridl

Organized and Supervised Recreation.

6:00 Supper, and cleanup
Then free time until campfire

7:30 - 9:15 Campfire program

9:15 Cocoa and snack

9:30 Lights out

Tuesday, May 11

6:30 Morning hike led by one of the staff. Optional. May be a Bird Walk, Flower Walk, or just a nature hike.

7:00 Roll out of bed

7:30 Breakfast

8:00 - 8:30 Kamp Kapers -- cleanup and cabin duty

8:30 - 8:45 Short inspirational program.

8:50 - 11:10 Instructional Groups

Group C - Geographic studies -- Jim Hicks, Bob Wilson
Group D - Geologic studies ---- Dan Fletcher, Frank Dell
Group A - Ecologic studies ---- Jim Strickland, Sue Dunbar, Jerry Pike
Group B - Plot studies -------- Mike Chapman

11:15 - 12:00 Arts and Crafts -- Lynette Lorang, Phyllis Ridl (group C, D)

First Aid Instruction -- Dr. Crellin (group A, B)

12:15 - 1:30 Lunch, cleanup, and free time

1:30 - 3:45 Instructional Groups

Group D - Geographic studies -- Jim Hicks, Bob Wilson
Group A - Geologic studies ---- Dan Fletcher, Frank Dell
Group B - Ecologic studies ---- Jim Strickland, Sue Dunbar, Jerry Pike
Group C - Plot studies -------- Mike Chapman

4:00 - 5:15 Recreation (organized and supervised games) and free time
Art free time for Groups C & D.
Lynette Lorang, Phyllis Ridl (also over nite)

5:15 Cleanup for Dinner

5:30 - 6:00 Dinner and Kamp Kapers

6:00 Pack up

Go to cabins. Pack completely. Tag each piece of luggage with tag bearing child's name, school, and session number.

Take all luggage to porch of Staff Hall (not Assembly Hall).

6:45 Buses arrive with next group of children. Unload at Assembly Hall.

Buses then go to Staff Hall and load those returning to Billings.

7:15 Buses leave.

about 8:45 p.m. Buses arrive at children's own schools.

Session # 2
Page 1

Environmental Education Program, Spring 1971

Billings D strict #2 and Eastern Montana College

Session # 2 , on Wednesday, May 12, and Thursday , May 13.

chool: Boulder ,
Principal: Lundgren , Teacher Dempsey , # children 31 (boys 18 , girls 13)

chool: Newman ,
Principal: Richens , Teacher Goldberg , # children 31 (boys 17 , girls 14)

chool: Poly ,
Principal: Croff , Teacher Sayler , # children 31 (boys 13 , girls 18)

chool: _____,
Principal: _____, Teacher _____, # children ____ (boys___, girls___)

Totals -------- 93 (boys 48 , girls 45)

irector for this session: Ed Heiser . Medical Doctor for this session: Dr. J. Anderson

ravel to camp.

On Tuesday , May 11 , children are to have supper at home,
and be at their own school by 5:00 p.m., with all their equipment.
Teachers and some counsellors will ride the buses with the children.
Each item (sleeping bag, suitcase, etc.) is to bear a tag with the
child's name, school, and session number.

uses arrive at Camp about 7:00 p.m. Unload at Assembly Hall.
abin assignments. Get settled. Brief campfire program.
ocoa and snack served.
ights out at 9:30 p.m.

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ednesday , May 12

:00 a.m.	Roll out of bed
:30	Breakfast and Cabin Duty
:00 - 8:30	Kamp Kapers (cleanup)
:30 - 8:45	Orientation, and short inspirational program
:50 - 11:10	Field Instructional Groups

Group A - Geographic studies -- Jim Hicks, Dorothy Dempsey
Group B - Geologic studies ---- Tim Mares, Roberta Sayler
Group C - Ecologic studies ---- Clyde Goldberg
Group D - Plot studies -------- Dave Kirkness

1:15 - 12:00	Arts and Crafts -- Andrea Woltersdorf, Don Hanson (group A, B)
	First Aid Instruction -- Dr. Anderson (group C, D)
2:00 noon	Cleanup for lunch
2:15 - 1:30	Lunch, Kamp Kapers, cleanup and a bit of free time.
:30 - 3:45	Instructional Groups

Group B - Geographic studies -- Jim Hicks, Dorothy Dempsey
Group C - Geologic studies ---- Tim Mares, Roberta Sayler
Group D - Ecologic studies ---- Clyde Goldberg
Group A - Plot studies -------- Bob Thompson

4:00 - 6:00	Free time and Recreation. Write letters. Hike with a counsellor. Complete Art work (group A & B only) started this morning. Andrea Woltersdorf, Don Hanson
	Organized and Supervised Recreation.
6:00	Supper, and cleanup Then free time until campfire
7:30 - 9:15	Campfire program
9:15	Cocoa and snack
9:30	Lights out

Thursday, May 13

6:30	Morning hike led by one of the staff. Optional. May be a Bird Walk, Flower Walk, or just a nature hike.
7:00	Roll out of bed
7:30	Breakfast
8:00 - 8:30	Kamp Kapers -- cleanup and cabin duty
8:30 - 8:45	Short inspirational program.
8:50 - 11:10	Instructional Groups Group C - Geographic studies -- Jim Hicks, Dorothy Dempsey Group D - Geologic studies ---- Rick Klaboe, Roberta Sayler Group A - Ecologic studies ---- Sue Dunbar, Clyde Goldberg Group B - Plot studies -------- Dave Kirkness
11:15 - 12:00	Arts and Crafts -- Andrea Woltersdorf, Don Hanson (group C, D) First Aid Instruction -- Dr. Anderson (group A, B)
12:15 - 1:30	Lunch, cleanup, and free time
1:30 - 3:45	Instructional Groups Group D - Geographic studies -- Jim Hicks, Dorothy Dempsey Group A - Geologic studies ---- Rick Klaboe, Roberta Sayler Group B - Ecologic studies ---- Sue Dunbar, Clyde Goldberg Group C - Plot studies -------- Dave Kirkness
4:00 - 5:15	Recreation (organized and supervised games) and free time Art free time for Groups C & D. Andrea Woltersdorf, Don Hanson (also over nite)
5:15	Cleanup for Dinner
5:30 - 6:00	Dinner and Kamp Kapers
6:00	Pack up
	Go to cabins. Pack completely. Tag each piece of luggage with tag bearing child's name, school, and session number.
	Take all luggage to porch of Staff Hall (not Assembly Hall).
6:45	Buses arrive with next group of children. Unload at Assembly Hall.
	Buses then go to Staff Hall and load those returning to Billings.
7:15	Buses leave.
about 8:45 p.m.	Buses arrive at children's own schools.

Session # 3
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Environmental Education Program, Spring 1971

Billings District #2 and Eastern Montana College

Session # 3, on Friday, May 14, and Saturday, May 15.

School: Central Heights,
Principal: Langstaff, Teacher Halvor, # children 25 (boys 11, girls 14)

School: Newman,
Principal: Richins, Teacher Dixie Pike, # children 31 (boys 17, girls 14)

School: Highland,
Principal: Brinkman, Teacher Jerry Pike, # children 23 (boys 13, girls 10)

School: Rose Park,
Principal: Heiser, Teacher Zerr, # children 24 (boys 10, girls 14)

Totals -------- 103 (boys 51, girls 52)

Director for this session: Erick Erickson. Medical Doctor for this session: (to be assigne

Travel to camp.

On Thursday, May 13, children are to have supper at home, and be at their own school by 5:00 p.m., with all their equipment. Teachers and some counsellors will ride the buses with the children. Each item (sleeping bag, suitcase, etc.) is to bear a tag with the child's name, school, and session number.

Buses arrive at Camp about 7:00 p.m. Unload at Assembly Hall.
Cabin assignments. Get settled. Brief campfire program.
Cocoa and snack served.
Lights out at 9:30 p.m.

Friday, May 14

7:00 a.m.	Roll out of bed
7:30	Breakfast and Cabin Duty
8:00 - 8:30	Kamp Kapers (cleanup)
8:30 - 8:45	Orientation, and short inspirational program
8:50 - 11:10	Field Instructional Groups

Group A - Geographic studies -- Jim Hicks, Dixie Pike
Group B - Geologic studies ---- Tim Mares, Janet Halvor
Group C - Ecologic studies ---- Mrs. Zerr, Dr. Schoenthal
Group D - Plot studies -------- Mike Chapman, Dave Kirkness, Jerry Pike

11:15 - 12:00	Arts and Crafts -- Andrea Woltersdorf, Don Hanson (group A, B)
	First Aid Instruction -- _____ (group C, D)
12:00 noon	Cleanup for lunch
12:15 - 1:30	Lunch, Kamp Kapers, cleanup and a bit of free time.
1:30 - 3:45	Instructional Groups

Group B - Geographic studies -- Jim Hicks, Dixie Pike
Group C - Geologic studies ---- Tim Mares, Janet Halvor
Group D - Ecologic studies ---- Mrs. Zerr, Dr. Schoenthal
Group A - Plot studies -------- Mike Chapman, Dave Kirkness, Jerry Pike

00 - 6:00 Free time and Recreation. Write letters. Hike with a counsellor.
Complete Art work (group A & B only) started this morning.
Andrea Woltersdorf, Don Hansen with Margaret Fitzgerald over nite

Organized and Supervised Recreation.

00 Supper, and cleanup
Then free time until campfire

30 - 9:15 Campfire program

15 Cocoa and snack

30 Lights out

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turday, May 15

30 Morning hike led by one of the staff. Optional. May be a Bird Walk, Flower Walk, or just a nature hike.

00 Roll out of bed

30 Breakfast

00 - 8:30 Kamp Kapers -- cleanup and cabin duty

30 - 8:45 Short inspirational program.

50 - 11:10 Instructional Groups

Group C - Geographic studies -- Randy Coley, Prof. Andersen, Dixie Pike
Group D - Geologic studies ---- Dick Fick, Dan Fletcher, Janet Halvor
Group A - Ecologic studies ---- Jim Strickland, Dr. Schoenthal, Mrs. Zerr
Group B - Plot studies -------- Dave Kirkness, Mike Chapman, Jerry Pike

:15 - 12:00 Arts and Crafts -- Margaret Fitzgerald, Judy Fischer (group C, D)

First Aid Instruction -- _____ (group A, B)

:15 - 1:30 Lunch, cleanup, and free time

30 - 3:45 Instructional Groups

Group D - Geographic studies -- Randy Coley, Prof. Andersen, Dixie Pike
Group A - Geologic studies ---- Dick Fick, Dan Fletcher, Janet Halvor
Group B - Ecologic studies ---- Jim Strickland, Dr. Schoenthal, Mrs. Zerr
Group C - Plot studies -------- Dave Kirkness, Mike Chapman, Jerry Pike

00 - 5:15 Recreation (organized and supervised games) and free time
Art free time for Groups C & D.
Margaret Fitzgerald, Judy Fischer (overnite)

15 Cleanup for Dinner

30 - 6:00 Dinner and Kamp Kapers

00 Pack up

Go to cabins. Pack completely. Tag each piece of luggage with tag bearing child's name, school, and session number.

Take all luggage to porch of Staff Hall (not Assembly Hall).

45 Buses arrive with next group of children. Unload at Assembly Hall.

Buses then go to Staff Hall and load those returning to Billings.

15 Buses leave.

out 8:45 p.m. Buses arrive at children's own schools.

Session # 4
Page 1

Environmental Education Program, Spring 1971

Billings District #2 and Eastern Montana College

Session # 4 , on Sunday , May 16, and Monday , May 17.

School: Grand ,
Principal: Wynn , Teacher McDonald , # children 27 (boys 11 , girls 16)

School: Boulder ,
Principal: Lundgren , Teacher O'Connor , # children 32 (boys 15 , girls 17)

School: Rose Park ,
Principal: Heiser , Teacher Rimmer , # children 22 (boys 9 , girls 13)

School: ,
Principal: , Teacher , # children ___ (boys ___ , girls ___)

Totals -------- 81 (boys 35 , girls 46)

Director for this session: Ed Heiser . Medical Doctor for this session: Dr. Harr

Travel to camp.

On Saturday , May 15, children are to have supper at home,
and be at their own school by 5:00 p.m., with all their equipment.
Teachers and some counsellors will ride the buses with the children.
Each item (sleeping bag, suitcase, etc.) is to bear a tag with the
child's name, school, and session number.

Buses arrive at Camp about 7:00 p.m. Unload at Assembly Hall.
Cabin assignments. Get settled. Brief campfire program.
Cocoa and snack served.
Lights out at 9:30 p.m.

Sunday , May 16

7:00 a.m. Roll out of bed

7:30 Breakfast and Cabin Duty

8:00 - 8:30 Kamp Kapers (cleanup)

8:15 - 8:45 Inter-denominational Sunday Service, conducted by Pastor John Lee.

8:50 - 11:10 Field Instructional Groups

Group A - Geographic studies -- Randy Coley, Prof. Andersen, Elsie O'Connor
Group B - Geologic studies ---- Dick Fick, Dan Fletcher, Aletha McDonald
Group C - Ecologic studies ---- J. Strickland, Dr. Schoenthal, D. Rimmer
Group D - Plot studies -------- Mike Chapman, Dave Kirkness

11:15 - 12:00 Arts and Crafts -- Kim Bruttomesso, Judy Fischer, Marilyn Stebbins (group A, B

First Aid Instruction -- Dr. Harr (group C, D)

12:00 noon Cleanup for lunch

12:15 - 1:30 Lunch, Kamp Kapers, cleanup and a bit of free time.

1:30 - 3:45 Instructional Groups

Group B - Geographic studies -- Randy Coley, Prof. Andersen, Elsie O'Connor
Group C - Geologic studies ---- Dick Fick, Dan Fletcher, Aletha McDonald
Group D - Ecologic studies ---- J. Strickland, Dr. Schoenthal, D. Rimmer
Group A - Plot studies -------- Mike Chapman, Dave Kirkness

4:00 - 6:00	Free time and Recreation. Write letters. Hike with a counsellor. Complete Art work (group A & B only) started this morning. Kim Bruttomesso, Judy Fischer, Marilyn Stebbins (overnite Organized and Supervised Recreation.
6:00	Supper, and cleanup Then free time until campfire
7:30 - 9:15	Campfire program
9:15	Cocoa and snack
9:30	Lights out

Monday, May 17

6:30	Morning hike led by one of the staff. Optional. May be a Bird Walk, Flower Walk, or just a nature hike.
7:00	Roll out of bed
7:30	Breakfast
8:00 - 8:30	Kamp Kapers -- cleanup and cabin duty
8:30 - 8:45	Short inspirational program.
8:50 - 11:10	Instructional Groups Group C - Geographic studies -- Jim Hicks Group D - Geologic studies ---- Tim Mares, Aletha McDonald Group A - Ecologic studies ---- Mrs. O'Connor, Dorothy Rimmer Group B - Plot studies -------- Mike Chapman, Dave Kirkness
11:15 - 12:00	Arts and Crafts -- Betty Johnson, Jack Haker (group C, D) First Aid Instruction -- Dr. Harr (group A, B)
12:15 - 1:30	Lunch, cleanup, and free time
1:30 - 3:45	Instructional Groups Group D - Geographic studies -- Jim Hicks Group A - Geologic studies ---- Tim Mares, Aletha McDonald Group B - Ecologic studies ---- Mrs. O'Connor, Dorothy Rimmer Group C - Plot studies -------- Mike Chapman
4:00 - 5:15	Recreation (organized and supervised games) and free time Art free time for Groups C & D. Betty Johnson, Jack Haker (both overnite)
5:15	Cleanup for Dinner
5:30 - 6:00	Dinner and Kamp Kapers
6:00	Pack up Go to cabins. Pack completely. Tag each piece of luggage with tag bearing child's name, school, and session number. Take all luggage to porch of Staff Hall (not Assembly Hall).
6:45	Buses arrive with next group of children. Unload at Assembly Hall. Buses then go to Staff Hall and load those returning to Billings.
7:15	Buses leave.
about 8:45 p.m.	Buses arrive at children's own schools.

Session # 5
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Environmental Education Program, Spring 1971

Billings District #2 and Eastern Montana College

Session # 5 , on Tuesday , May 18, and Wednesday , May 19.

chool: Grand ,
Principal: Wynn , Teacher Black , # children 28 (boys 14 , girls 14)

chool: Central Heights ,
Principal: Langstaff , Teacher Metzger , # children 25 (boys 13 , girls 12)

chool: Highland ,
Principal: Brinkman , Teacher McCabe , # children 23 (boys 12 , girls 11)

chool: Central Heights ,
Principal: Langstaff , Teacher Clemens , # children 24 (boys 12 , girls 12)
Totals -------- 100 (boys 51 , girls 49)

irector for this session: Charles Reed . Medical Doctor for this session: (to be assigned

ravel to camp.

On Monday , May 17, children are to have supper at home,
and be at their own school by 5:00 p.m., with all their equipment.
Teachers and some counsellors will ride the buses with the children.
Each item (sleeping bag, suitcase, etc.) is to bear a tag with the
child's name, school, and session number.

uses arrive at Camp about 7:00 p.m. Unload at Assembly Hall.
abin assignments. Get settled. Brief campfire program.
ocoa and snack served.
ights out at 9:30 p.m.

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uesday , May 18

:00 a.m.	Roll out of bed
:30	Breakfast and Cabin Duty
:00 - 8:30	Kamp Kapers (cleanup)
:30 - 8:45	Orientation, and short inspirational program
:50 - 11:10	Field Instructional Groups

Group A - Geographic studies -- Jim Hicks, Maria Metzger
Group B - Geologic studies ---- Rick Klaboe, Helen McCabe
Group C - Ecologic studies ---- Jim Strickland, Leslie Clemens
Group D - Plot studies -------- Bob Thompson, James Black

1:15 - 12:00 Arts and Crafts -- Betty Johnson, Jack Haker (group A, B)
First Aid Instruction -- _____ (group C, D)

2:00 noon Cleanup for lunch

2:15 - 1:30 Lunch, Kamp Kapers, cleanup and a bit of free time.

:30 - 3:45 Instructional Groups

Group B - Geographic studies -- Jim Hicks, Maria Metzger
Group C - Geologic studies ---- Rick Klaboe, Helen McCabe
Group D - Ecologic studies ---- Jim Strickland, Leslie Clemens
Group A - Plot studies -------- Bob Thompson, James Black

Session # 5
Page 2

4:00 - 6:00 Free time and Recreation. Write letters. Hike with a counsellor.
Complete Art work (group A & B only) started this morning.
Betty Johnson, Jack Haker, Laura Brue (overnite)

Organized and Supervised Recreation.

5:00 Supper, and cleanup
Then free time until campfire

7:30 - 9:15 Campfire program

9:15 Cocoa and snack

9:30 Lights out

Wednesday, May 19

5:30 Morning hike led by one of the staff. Optional. May be a Bird Walk, Flower Walk, or just a nature hike.

7:00 Roll out of bed

7:30 Breakfast

8:00 - 8:30 Kamp Kapers -- cleanup and cabin duty

8:30 - 8:45 Short inspirational program.

8:50 - 11:10 Instructional Groups

Group C - Geographic studies -- Jim Hicks, Maria Metzger
Group D - Geologic studies ---- Tim Mares, Helen McCabe
Group A - Ecologic studies ---- Dr. Schoenthal, Leslie Clemens
Group B - Plot studies -------- Dave Kirkness, Bob Thompson, James Black

11:15 - 12:00 Arts and Crafts -- Laura Brue, Serina Becker (group C, D)

First Aid Instruction -- _____ (group A, B)

12:15 - 1:30 Lunch, cleanup, and free time

1:30 - 3:45 Instructional Groups

Group D - Geographic studies -- Jim Hicks, Maria Metzger
Group A - Geologic studies ---- Tim Mares, Helen McCabe
Group B - Ecologic studies ---- Dr. Schoenthal, Leslie Clemens
Group C - Plot studies -------- Bob Thompson, James Black

4:00 - 5:15 Recreation (organized and supervised games) and free time
Art free time for Groups C & D.
Laura Brue, Serina Becker (overnite)

5:15 Cleanup for Dinner

5:30 - 6:00 Dinner and Kamp Kapers

6:00 Pack up

Go to cabins. Pack completely. Tag each piece of luggage with tag bearing child's name, school, and session number.

Take all luggage to porch of Staff Hall (not Assembly Hall).

7:45 Buses arrive with next group of children. Unload at Assembly Hall.

Buses then go to Staff Hall and load those returning to Billings.

8:15 Buses leave.

About 8:45 p.m. Buses arrive at children's own schools.

Session # 6
Page 1

Environmental Education Program, Spring 1971

Billings District #2 and Eastern Montana College

Session # 6 , on Thursday , May 20, and Friday , May 21.

School: Boulder ,
Principal: Lundgren , Teacher Green , # children 32 (boys 17 , girls 15)

School: Central Heights ,
Principal: Langstaff , Teacher Halvor , # children 25 (boys 13 , girls 12)

School: Grand ,
Principal: Wynn , Teacher Krimmer , # children 26 (boys 13 , girls 13)

School: Rimrock ,
Principal: Lane , Teacher Pederson , # children 25 (boys 13 , girls 12)

Totals -------- 108 (boys 56 , girls 52)

Director for this session: Ed Heiser . Medical Doctor for this session: Dr. Yenko

Travel to camp.

On Wednesday , May 19, children are to have supper at home, and be at their own school by 5:00 p.m., with all their equipment. Teachers and some counsellors will ride the buses with the children. Each item (sleeping bag, suitcase, etc.) is to bear a tag with the child's name, school, and session number.

uses arrive at Camp about 7:00 p.m. Unload at Assembly Hall.
abin assignments. Get settled. Brief campfire program.
ocoa and snack served.
ights out at 9:30 p.m.

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hursday , May 20

:00 a.m.	Roll out of bed
:30	Breakfast and Cabin Duty
:00 - 8:30	Kamp Kapers (cleanup)
:30 - 8:45	Orientation, and short inspirational program
:50 - 11:10	Field Instructional Groups

Group A - Geographic studies -- Jim Hicks, Louise Pederson
Group B - Geologic studies ---- Roland Grant, Rick Klaboe, Walter Krimmer
Group C - Ecologic studies ---- Sue Dunbar, Archie Green
Group D - Plot studies -------- Bob Thompson, Janet Halvor

1:15 - 12:00	Arts and Crafts -- Karen Grinde, Winnie Van Swearingen (group A, B)
	First Aid Instruction -- Dr. Yenko (group C, D)
2:00 noon	Cleanup for lunch
2:15 - 1:30	Lunch, Kamp Kapers, cleanup and a bit of free time.
:30 - 3:45	Instructional Groups

Group B - Geographic studies -- Jim Hicks, Louise Pederson
Group C - Geologic studies ---- Roland Grant, Rick Klaboe, Walter Krimmer
Group D - Ecologic studies ---- Sue Dunbar, Archie Green
Group A - Plot studies -------- Bob Thompson, Janet Halvor

4:00 - 6:00 Free time and Recreation. Write letters. Hike with a counsellor.
Complete Art work (group A & B only) started this morning.
Karen Grinde, Winnie van Swearingen (both overnite)

Organized and Supervised Recreation.

5:00 Supper, and cleanup
Then free time until campfire

7:30 - 9:15 Campfire program

9:15 Cocoa and snack

9:30 Lights out

Friday, May 21

6:30 Morning hike led by one of the staff. Optional. May be a Bird Walk, Flower Walk, or just a nature hike.

7:00 Roll out of bed

7:30 Breakfast

8:00 - 8:30 Kamp Kapers -- cleanup and cabin duty

8:30 - 8:45 Short inspirational program.

8:50 - 11:10 Instructional Groups

Group C - Geographic studies -- Jim Hicks, Louise Pederson
Group D - Geologic studies ---- Roland Grant, Walter Krimmer
Group A - Ecologic studies ---- Archie Green
Group B - Plot studies -------- Bob Thompson, Janet Halvor

11:15 - 12:00 Arts and Crafts -- Karen Grinde, Winnie van Swearingen (group C, D)

First Aid Instruction -- Dr. Yenko (group A, B)

12:15 - 1:30 Lunch, cleanup, and free time

1:30 - 3:45 Instructional Groups

Group D - Geographic studies -- Jim Hicks, Louise Pederson
Group A - Geologic studies ---- Roland Grant, Walter Krimmer
Group B - Ecologic studies ---- Archie Green
Group C - Plot studies -------- Bob Thompson, Janet Halvor

4:00 - 5:15 Recreation (organized and supervised games) and free time
Art free time for Groups C & D.
Karen Grinde, Winnie van Swearingen (overnite ?)

5:15 Cleanup for Dinner

5:30 - 6:00 Dinner and Kamp Kapers

6:00 Pack up

Go to cabins. Pack completely. Tag each piece of luggage with tag bearing child's name, school, and session number.

Take all luggage to porch of Staff Hall (not Assembly Hall).

6:45 Buses arrive with next group of children. Unload at Assembly Hall.

Buses then go to Staff Hall and load those returning to Billings.

7:15 Buses leave.

about 8:45 p.m. Buses arrive at children's own schools.

Session # 7
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Environmental Education Program, Spring 1971

Billings District #2 and Eastern Montana College

Session # 7 , on Saturday , May 22 , and Sunday , May 23 .

School: Bitterroot ,
Principal: Easton , Teacher Iams , # children 30 (boys 14 , girls 16)

School: Poly ,
Principal: Groff , Teacher Jellison , # children 32 (boys 14 , girls 18)

School: Taft ,
Principal: Mares , Teacher Schonkwiler , # children 38 (boys 18 , girls 20)

School: _____ ,
Principal: _____ , Teacher _____ , # children ____ (boys ___ , girls ___)

Totals -------- 100 (boys 46 , girls 54)

Director for this session: Erick Erickson . Medical Doctor for this session: Dr. Wierzbinski

Travel to camp.

On Friday , May 21, children are to have supper at home, and be at their own school by 5:00 p.m., with all their equipment. Teachers and some counsellors will ride the buses with the children. Each item (sleeping bag, suitcase, etc.) is to bear a tag with the child's name, school, and session number.

Buses arrive at Camp about 7:00 p.m. Unload at Assembly Hall.
Cabin assignments. Get settled. Brief campfire program.
Cocoa and snack served.
Lights out at 9:30 p.m.

Saturday , May 22

:00 a.m. Roll out of bed

:30 Breakfast and Cabin Duty

:00 - 8:30 Kamp Kapers (cleanup)

:30 - 8:45 Orientation, and short inspirational program

:50 - 11:10 Field Instructional Groups

Group A - Geographic studies -- Randy Coley, Prof. Andersen, Dan Jellison
Group B - Geologic studies ---- Dick Fick, Prof. Grant, Violet Schonkwiler
Group C - Ecologic studies ---- Jim Strickland, Dr. Schoenthal
Group D - Plot studies -------- Dave Kirkness, Jeff Iams

1:15 - 12:00 Arts and Crafts -- Anne Gilliam, Glen Close (group A, B)

First Aid Instruction -- Dr. Wierzbinski (group C, D)

2:00 noon Cleanup for lunch

2:15 - 1:30 Lunch, Kamp Kapers, cleanup and a bit of free time.

:30 - 3:45 Instructional Groups

Group B - Geographic studies -- Randy Coley, Prof. Andersen, Dan Jellison
Group C - Geologic studies ---- Dick Fick, Prof. Grant, Violet Schonkwiler
Group D - Ecologic studies ---- Jim Strickland, Dr. Schoenthal
Group A - Plot studies -------- Dave Kirkness, Jeff Iams

4:00 - 6:00 Free time and Recreation. Write letters. Hike with a counsellor.
Complete Art work (group A & B only) started this morning.
Anne Gilliam, Glen Close (both overnite)

Organized and Supervised Recreation.

5:00 Supper, and cleanup
Then free time until campfire

7:30 - 9:15 Campfire program

9:15 Cocoa and snack

9:30 Lights out

Sunday, May 23

5:30 Morning hike led by one of the staff. Optional. May be a Bird Walk, Flower Walk, or just a nature hike.

7:00 Roll out of bed

7:30 Breakfast

8:00 - 8:30 Kamp Kapers -- cleanup and cabin duty

8:15 - 8:45 Inter-denominational Sunday Service, conducted by Father Lester.

8:50 - 11:10 Instructional Groups

Group C - Geographic studies -- Randy Coley, Prof. Andersen, Dan Jellison
Group D - Geologic studies ---- Dick Fick, Prof. Grant, Violet Schonkwiler
Group A - Ecologic studies ---- Jim Strickland, Sue Dunbar
Group B - Plot studies -------- Dave Kirkness, Jeff Iams

11:15 - 12:00 Arts and Crafts -- Anne Gilliam, Glen Close (group C, D)

First Aid Instruction -- Dr. Wierzbinski (group A, B)

12:15 - 1:30 Lunch, cleanup, and free time

1:30 - 3:45 Instructional Groups

Group D - Geographic studies -- Randy Coley, Prof. Andersen, Dan Jellison
Group A - Geologic studies ---- Dick Fick, Prof. Grant, Violet Schonkwiler
Group B - Ecologic studies ---- Jim Strickland, Sue Dunbar
Group C - Plot studies -------- Dave Kirkness, Jeff Iams

4:00 - 5:15 Recreation (organized and supervised games) and free time
Art free time for Groups C & D.
Anne Gilliam, Glen Close, Vicki Berentson (overnite)

5:15 Cleanup for Dinner

5:30 - 6:00 Dinner and Kamp Kapers

7:00 Pack up

Go to cabins. Pack completely. Tag each piece of luggage with tag bearing child's name, school, and session number.

Take all luggage to porch of Staff Hall (not Assembly Hall).

7:45 Buses arrive with next group of children. Unload at Assembly Hall.

Buses then go to Staff Hall and load those returning to Billings.

8:15 Buses leave.

About 8:45 p.m. Buses arrive at children's own schools.

Session # 8
Page 1

Environmental Education Program, Spring 1971

Billings District #2 and Eastern Montana College

Session # 8 , on Monday , May 24, and Tuesday , May 25.

chool: Rimrock ,
Principal: Lane , Teacher Craig , # children 25 (boys 14 , girls 11)

chool: Rimrock ,
Principal: Lane , Teacher Abbott , # children 26 (boys 13 , girls 13)

chool: Grand ,
Principal: Wynn , Teacher Holmgren , # children 27 (boys 13 , girls 14)

chool: Poly ,
Principal: Croff , Teacher Tubman , # children 30 (boys 10 , girls 20)

Totals -------- 108 (boys 50 , girls 58)

irector for this session: Charles Reed . Medical Doctor for this session: Dr. Hartman

ravel to camp.

On Sunday , May 23, children are to have supper at home,
and be at their own school by 5:00 p.m., with all their equipment.
Teachers and some counsellors will ride the buses with the children.
Each item (sleeping bag, suitcase, etc.) is to bear a tag with the
child's name, school, and session number.

uses arrive at Camp about 7:00 p.m. Unload at Assembly Hall.
abin assignments. Get settled. Brief campfire program.
ocoa and snack served.
ights out at 9:30 p.m.

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onday , May 24

:00 a.m. Roll out of bed

:30 Breakfast and Cabin Duty

:00 - 8:30 Kamp Kapers (cleanup)

:30 - 8:45 Orientation, and short inspirational program

:50 - 11:10 Field Instructional Groups

Group A - Geographic studies -- Randy Coley, Jim Hicks, Kathleen Tubman
Group B - Geologic studies ---- Dan Fletcher, Patti Abbott
Group C - Ecologic studies ---- Sue Dunbar, Laura Holmgren
Group D - Plot studies -------- Dave Kirkness, Bob Thompson, Jack Craig

.:15 - 12:00 Arts and Crafts -- Vicki Berentson, Mary Ann Fabian (group A, B)

First Aid Instruction -- Dr. Hartman (group C, D)

:00 noon Cleanup for lunch

:15 - 1:30 Lunch, Kamp Kapers, cleanup and a bit of free time.

30 - 3:45 Instructional Groups

Group B - Geographic studies -- Randy Coley, Jim Hicks, Kathleen Tubman
Group C - Geologic studies ---- Dan Fletcher, Patti Abbott
Group D - Ecologic studies ---- Sue Dunbar, Laura Holmgren
Group A - Plot studies -------- Bob Thompson, Jack Craig

4:00 - 6:00	Free time and Recreation. Write letters. Hike with a counsellor. Complete Art work (group A & B only) started this morning. Vicki Berentson, Mary Ann Fabian (overnite)
	Organized and Supervised Recreation.
5:00	Supper, and cleanup Then free time until campfire
7:30 - 9:15	Campfire program
9:15	Cocoa and snack
9:30	Lights out

Tuesday, May 25

6:30	Morning hike led by one of the staff. Optional. May be a Bird Walk, Flower Walk, or just a nature hike.
7:00	Roll out of bed
7:30	Breakfast
8:00 - 8:30	Kamp Kapers -- cleanup and cabin duty
8:30 - 8:45	Short inspirational program.
8:50 - 11:10	Instructional Groups Group C - Geographic studies -- Randy Coley, Jim Hicks, Kathleen Tubman Group D - Geologic studies ---- Dan Fletcher, Prof. Grant, Patti Abbott Group A - Ecologic studies ---- Sue Dunbar, Jim Strickland, Laura Holmgren Group B - Plot studies -------- Bob Thompson, Jack Craig
11:15 - 12:00	Arts and Crafts -- Mary Ann Fabian, Krys Dahlberg (group C, D) First Aid Instruction -- Dr. Hartman (group A, B)
12:15 - 1:30	Lunch, cleanup, and free time
1:30 - 3:45	Instructional Groups Group D - Geographic studies -- Randy Coley, Jim Hicks, Kathleen Tubman Group A - Geologic studies ---- Dan Fletcher, Prof. Grant, Patti Abbott Group B - Ecologic studies ---- Sue Dunbar, Jim Strickland, Laura Holmgren Group C - Plot studies -------- Bob Thompson, Jack Craig
4:00 - 5:15	Recreation (organized and supervised games) and free time Art free time for Groups C & D. Mary Ann Fabian, Krys Dahlberg (overnite ?)
5:15	Cleanup for Dinner
5:30 - 6:00	Dinner and Kamp Kapers
6:00	Pack up Go to cabins. Pack completely. Tag each piece of luggage with tag bearing child's name, school, and session number. Take all luggage to porch of Staff Hall (not Assembly Hall).
6:45	Buses arrive with next group of children. Unload at Assembly Hall. Buses then go to Staff Hall and load those returning to Billings.
7:15	Buses leave.
about 8:45 p.m.	Buses arrive at children's own schools.

Session # 9
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Environmental Education Program, Spring 1971

Billings District #2 and Eastern Montana College

Session # 9 , on Wednesday , May 26 , and Thursday , May 27.

School: Highland ,
Principal: Brinkman , Teacher Anderson , # children 26 (boys 15, girls 11)

School: Bitterroot ,
Principal: Easton , Teacher Fradley , # children 30 (boys 13, girls 17)

School: Bitterroot ,
Principal: Easton , Teacher Smith , # children 29 (boys 14, girls 15)

School: Grand ,
Principal: Wynn , Teacher Hug , # children 26 (boys 13, girls 13)

Totals -------- 111 (boys 55, girls 56)

Director for this session: Erick Erickson . Medical Doctor for this session: Dr. Schwidde

Travel to camp.

On Tuesday , May 25, children are to have supper at home,
and be at their own school by 5:00 p.m., with all their equipment.
Teachers and some counsellors will ride the buses with the children.
Each item (sleeping bag, suitcase, etc.) is to bear a tag with the
child's name, school, and session number.

uses arrive at Camp about 7:00 p.m. Unload at Assembly Hall.
abin assignments. Get settled. Brief campfire program.
ocoa and snack served.
ights out at 9:30 p.m.

---

ednesday , May 26

:00 a.m.	Roll out of bed
:30	Breakfast and Cabin Duty
:00 - 8:30	Kamp Kapers (cleanup)
:30 - 8:45	Orientation, and short inspirational program
:50 - 11:10	Field Instructional Groups

Group A - Geographic studies -- Jim Hicks, Diane Fradley
Group B - Geologic studies ---- Dan Fletcher, Tim Mares, Mildred Hug
Group C - Ecologic studies ---- Sue Dunbar, Elizabeth Smith
Group D - Plot studies -------- Dave Kirkness, Lorraine Anderson

1:15 - 12:00 Arts and Crafts -- Karen Grinde, Winnie van Swearingen (group A, B)

First Aid Instruction -- Dr. Schwidde (group C, D)

2:00 noon Cleanup for lunch

2:15 - 1:30 Lunch, Kamp Kapers, cleanup and a bit of free time.

:30 - 3:45 Instructional Groups

Group B - Geographic studies -- Jim Hicks, Diane Fradley
Group C - Geologic studies ---- Dan Fletcher, Tim Mares, Mildred Hug
Group D - Ecologic studies ---- Sue Dunbar, Elizabeth Smith
Group A - Plot studies -------- Bob Thompson, Lorraine Anderson

4:00 - 6:00 Free time and Recreation. Write letters. Hike with a counsellor. Complete Art work (group A & B only) started this morning.
Karen Grinde, Winnie van Swearingen (both overnite)

Organized and Supervised Recreation.

5:00 Supper, and cleanup
Then free time until campfire

7:30 - 9:15 Campfire program

9:15 Cocoa and snack

9:30 Lights out

Thursday, May 27

5:30 Morning hike led by one of the staff. Optional. May be a Bird Walk, Flower Walk, or just a nature hike.

7:00 Roll out of bed

7:30 Breakfast

8:00 - 8:30 Kamp Kapers -- cleanup and cabin duty

8:30 - 8:45 Short inspirational program.

8:50 - 11:10 Instructional Groups

Group C - Geographic studies -- Jim Hicks, Diane Fradley
Group D - Geologic studies ---- Dan Fletcher, Mildred Hug
Group A - Ecologic studies ---- Sue Dunbar, Elizabeth Smith
Group B - Plot studies -------- Bob Thompson, Lorraine Anderson

11:15 - 12:00 Arts and Crafts -- Karen Grinde, Winnie van Swearingen (group C, D)

First Aid Instruction -- Dr. Schwidde (group A, B)

12:15 - 1:30 Lunch, cleanup, and free time

1:30 - 3:45 Instructional Groups

Group D - Geographic studies -- Jim Hicks, Diane Fradley
Group A - Geologic studies ---- Dan Fletcher, Mildred Hug
Group B - Ecologic studies ---- Sue Dunbar, Elizabeth Smith
Group C - Plot studies -------- Bob Thompson, Lorraine Anderson

4:00 - 5:15 Recreation (organized and supervised games) and free time
Art free time for Groups C & D.
Karen Grinde, Winnie van Swearingen

5:15 Cleanup for Dinner

5:30 - 6:00 Dinner and Kamp Kapers

7:00 Pack up

Go to cabins. Pack completely. Tag each piece of luggage with tag bearing child's name, school, and session number.

Take all luggage to porch of Staff Hall (not Assembly Hall).

7:45 Buses arrive with next group of children. Unload at Assembly Hall.

Buses then go to Staff Hall and load those returning to Billings.

8:15 Buses leave.

About 8:45 p.m. Buses arrive at children's own schools.

Attendance Record by Schools and Years

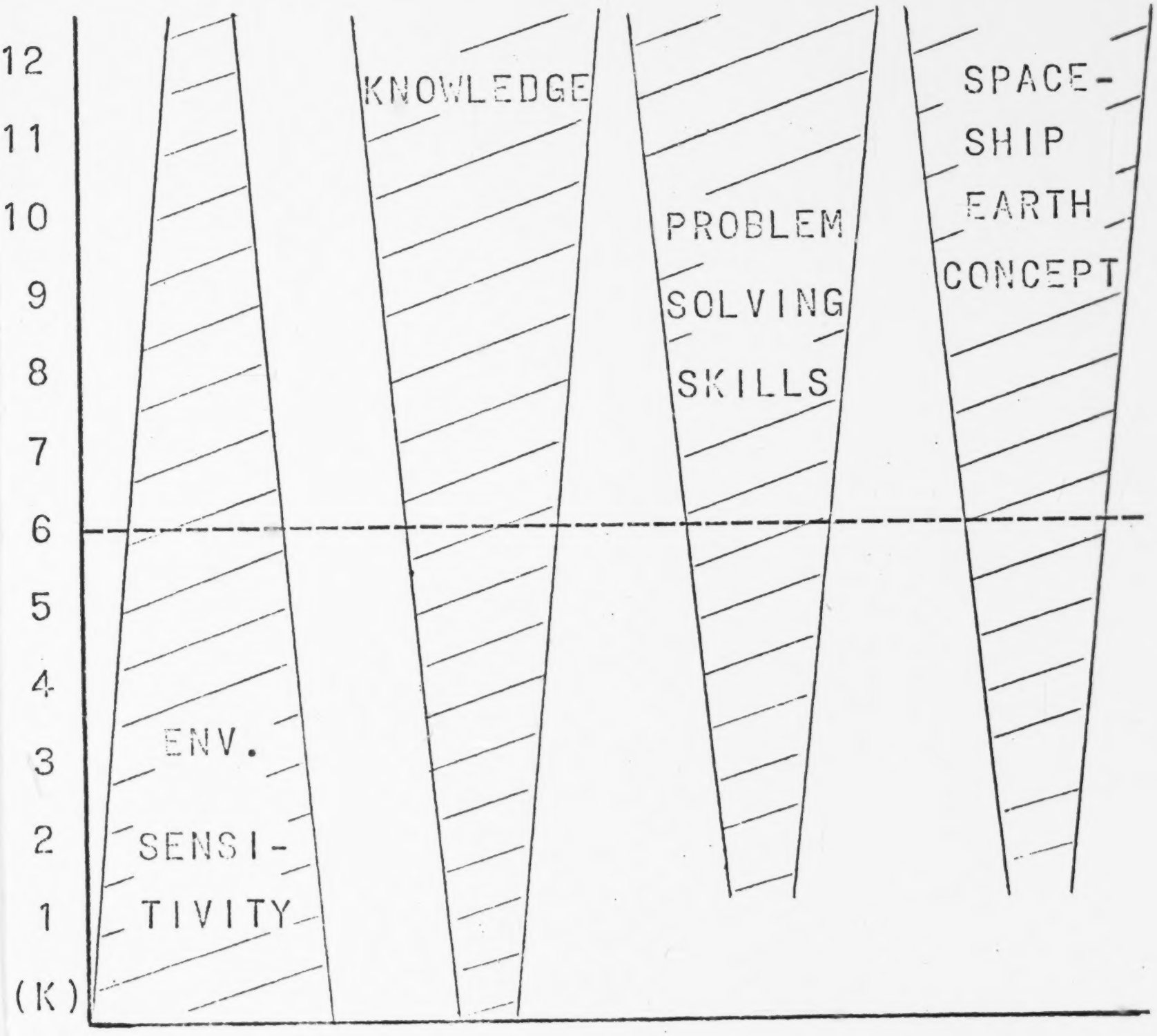
School	Spring 1967	Spring 1968	Spring 1969	Spring 1970	Spring 1971	Totals
Ashland			11			11
Bitterroot			49	63	89	201
Boulder				102	95	197
Central Hts.					99	99
Eastern Elem.	30	28	25	27	30	140
Grand				30	134	164
Highland				120	98	218
Meadowlark					22	22
Newman				48	62	110
Poly Drive					93	93
Rimrock			57	66	74	197
Rose Park					68	68
Taft		24	48	29	38	139
Totals	30	52	190	485	902	1,659

Financial Aspects of the Environmental Education Program

Item	Spring 1967	Spring 1968	Spring 1969	Spring 1970	Spring 1971
Transportation	special contract arrangements with E.U.B. Camp on the Boulder River	$ 70.00	$ 426.80	$ 1,437.00	$ 2,191.80
Food		519.16	1,225.00	2,530.23	3,345.81
Kitchen Services		120.00	700.00	1,434.00	2,245.00
Insurance		43.55	90.00	239.50	544.00
Supplies and Camp Rental		64.00	80.00	289.50	1,000.00
Other Expenses				502.05	661.17
Total Costs	------	$ 816.71	$ 2,521.80	$ 6,432.28	$ 9,987.78
Total # children	30	52	190	485	902
Approx. Cost/Child		$ 27.22	$ 13.27	$ 13.26	$ 11.07*

* $ 11.07/child was cost based on total children planned for.
Because of "no-shows", the cost per child actually in camp was $ 12.37.

BROAD CURRICULUM CONTENT
of a K-12
ENVIRONMENTAL EDUCATION PROGRAM



-- Chart based on one developed by Dr. William Stapp, School of Natural Resources, University of Michigan, Ann Arbor, Michigan.

Sample Evaluation Form
Used by Teachers at the Conclusion of the
Environmental Education Workshop at Glendive, Montana, fall 1971.

1. Introductory session -- Dr. Grilley
   a. General comment
   b. Constructive criticism

2. Lead-up activities to field day
   a. Dr. Clark's session
      1. General comment
      2. Constructive criticism
   b. Dr. Schoenthal's session
      1. General comment
      2. Constructive criticism
   c. Professor Anderson's session
      1. General comment
      2. Constructive criticism
   d. Professor Grant's session
      1. General comment
      2. Constructive criticism

3. Field day session
   a. General comments
      1.
      2.
      3.
      4.
   b. Constructive Criticisms
      1.
      2.
      3.
      4.

4. Closing session
   a. General comments
      1.
      2.
   b. Constructive Criticism
      1.
      2.

5. Free response comments.

Report on Teacher Evaluation of the Glendive Environmental Education Workshop, fall 1971

TO: Dr. Surwill, Dr. Rodney, Mr. Kittock, Mrs. Dimich, Dr. Madden and copies for info to Grilley, Andersen, Grant, Schoenthal, Erickson

FROM: Dr. Wilson F. Clark

DATE: October 13, 1971

RE: Evaluation by Teachers of the Glendive Extension Workshop in Environmental Education

The Glendive extension workshop in Environmental Education had its last session October 8. It was a summary, tag-ends, review, and evaluation session. We (the course staff) thought you would be interested in seeing the statements of general evaluation, and hence this report.

The Program

To put the course into perspective, here is a record of the several sessions -- all held at the Lincoln Elementary School in Glendive.

Sept. 10, Friday, 7:30 - 10:30 p.m. - Dr. Grilley. Course organization and registration. Introduction. Sheets issued and discussed dealing with the philosophy and objectives of environmental education, grading in the course, use of the Handbook which Mr. Heiser prepared, film "Beyond the Chalkboard," book and materials display and checkout by teachers. Film evaluation.

Sept. 17, Friday, 7:30 - 10:30 p.m. - Dr. Clark. The Inquiry and Discovery Approach. Participation in "The Web of Life," and in a exercise in observation and communication through key building.

Sept. 18, Saturday, 9:00 a.m. - noon - Dr. Schoenthal. Ecosystems -- what they are, how we study them. Exercise in analysis of ecosystems by keying specimens from a transect, compiling data, analysing it, and deducing the type of ecosystems along that transect.

Sept. 24, Friday, 7:30 - 10:30 p.m. - Professor Andersen. Participation lessons in geography, mapping, land use.

Sept. 25, Saturday, 9:00 a.m. - noon - Professor Grant. Participation lessons in geology, weather and climate, using the school grounds as a laboratory.

October 2, Saturday, 8:30 a.m. - 4:30 p.m. Andersen, Grant, Schoenthal, Clark. Planned as an all-day field trip. Rained out, so we worked indoors. Many activities shown, discussed, or actually carried out.

October 8, Friday, 8:30 - 11:00 p.m. - Dr. Grilley, Dr. Clark. Summary talk (Clark) on "What's all the Fuss About;" Slides and tape (Grilley) on the Billings District #2 and EMC program, stressing the pre-camp activities; Slides and models (Clark) on student projects; samples (Grilley) of Art projects, sociograms, tape of creative dramatics by a group of children; Concluding Discussion.

Grades: Each instructor in each of his portions had at least one participation exercise that the students handed in. These were corrected and just checked off (not graded) as evidence of participation. Grading will be based on papers to be turned in by or before November 30.

- -

Statements of General Evaluation by Participants

This course has given me many ideas of lessons we could adapt to our situation at school. My school is composed of 2 girls and 5 boys who dearly love to get outside, so I will be using many of these suggested activities. I also learned "how" to do certain things that I had never done before -- insect count.

The course has given me many ideas on how to teach ecology to children -- before now, I haven't been quite sure -- also I believe I can make the subject more interesting, more fun, and mor constructive for my pupils. Most of the course can be applied in my rural school to all grades. I feel the course has been worthwhile.

I have found the course extremely interesting and very timely. It enlarged my sphere of thinking i.e. there is more to pollution than foul air, noise - etc. Not only were we given problems but a suggestion of a way to arrive at a solution. We were stimulated not only to think but to act as well. I particularly enjoyed Dr. Clark's summary "What's the Fuss About" and could like to see it given to more people -- Homemakers -- Jaycees -- other community groups as well as school personnel. Thank you for an interesting session.

This has been very beneficial and helpful to me. I used many suggestions as making a weather chart; demonstrated the web of life, and Compass rose. Enjoyed the whole course. Thank you -- appreciate all your time and work.

The course was informative as well as interesting. It has provided an opportunity for us to look around and see all the things we should be exploring with our students. They are enjoying it, too.

I appreciate the ditto materials given to me in this class. The sessions were varied and well planned. Having a variety of instructors is good and holds interest.

I feel the workshop has been very worthwhile. I would gladly drive 80 miles, as I did this time, to attend another if it would be as interesting and educational. I feel I have a much better attitude about my environment and will be able to instill some of these things into the thoughts of my pupils.

Throughout this course I have learned or re-learned many concepts which I plan to put in action in my classroom. I am grateful for a chance to have a few of my senses reawakened. Plenty to do in this workshop, but all very understandable and lots of ideas to apply later.

As a Field Day help -- I think perhaps Dr. Hiatt (Glendive) could have helped with the badlands, had the weather been favorable. He is well informed about the Badlands. The course was very informative. Well planned. Each lesson showed that a lot of preparation had been done.

Final session did an excellent job of pulling the entire course together. Each and every session was very useful and adaptable to individual classrooms. I feel this was an exceptionally good class. I found everything very interesting. This class brought to light many things I can do in the classroom.

I believe this class was an exceptional one. It was interesting. All instructors were very good. It was not all theory. Although I do not teach science because of a departmental situation I found. Many things I can relate to environment in my subject fields.

It made me more aware of my teaching method when I was in the classroom. I value the things and materials I received and did during the course. I like the active things.

I enjoyed the class very much and intend on motivating my students and to provide for self-motivation. This was a well-worth course and I have always been interested in the environment. An important point is awareness and I am definitely more aware of things. Thank you for sharing your knowledge with me.

Very well organized - good materials - ideas were very well applicable to the school children.

I enjoyed the course very much. Hope to teach others to take care of this thin piece of skin -- representing the earth we live on! It's mighty precious! Let's clean up pollution!

Env. Ed - will leave indeligble impression. Will implement many things in months to follow. Will see all 3 in the boat will care.

I feel this course has made me more aware of the environment. But I wish there was more coverage of pollution, especially pollution in Montana.

Seems this whole course made everyone much more aware of our environment and hopefully these thoughts can be transmitted to the children.

The course as whole has given me many ideas I want try. The only problem is to find the time to get them all done. I have tried a couple of ideas and the students have been enthused about them. Each of the instructors worked hard and brought a lot of helpful material. With our crowded schedule it was helpful not to have homework and tests.

I liked the idea of different instructors - each a specialist in his field but each used a different approach or method of teaching. I did enjoy this course and feel it will be something I can and will use in my classroom. I especially appreciated the fact of no final examination. One can relax and learn without a fear of an exam.

I appreciated the fact that the whole course was something on the elementary level that we could take back to our classroom. It was the first class I have had for ever so long that I really enjoyed and felt that I could use. I liked the participation part rather than the study and feed back type of class. I am sure I will carry this idea back to my work. Already the students are making use of what we have talked about. They enjoy being physically involved in lessons as I did.

This I felt was a very worthwhile course which made me realize how much of this we can bring to the classroom in every day's lessons. I rather felt I brought too much farm life and reaction to nature into my compositions but now I'm glad I have.

The two best parts were Dr. Clark's Web of Life and Human Ecology Chart. These were very practical and can be adapted to any grade level.

I thought that much of the material was very difficult to adapt to the first grade level. The Web of Life was good and the human ecology chart given by Dr. Clark.

As an individual I have been made more aware of environment. I am going to try to work harder at accepting my responsibility towards our & environment. I hope to transfer some of this feeling toward my students.

Evaluation Sheet on the
Environmental Education Children's Program
At the Lions Camp at Red Lodge, Spring, 1970. (Given to all participating teachers and college student assistants.)

While the camp program is still fresh in your mind, we would sincerely appreciate ›ur giving us your evaluation and your constructive suggestions. We do ask that ›u sign this, so that we may follow up on your suggestions with you. However, if ›u wish, you may send it back unsigned -- but PLEASE SEND THIS BACK to Professor ·ick Erickson, Campus School, Eastern Montana College.

Thanks: Erick Erickson and Will Clark

Please state your position, duties, or connection in the program: (i.e.: cabin counsellor, doctor, instructor, recreation helper, arts and crafts, kitchen staff, etc.)

For what sessions were you at camp?
#1 - Monday/Tuesday, May 18/19. ___ all session; or what part _____.
#2 - Wednesday/Thursday, May 20/21. ___ all session; or what part _____.
#3 - Friday/Saturday, May 22/23. ___ all session; or what part _____.
#4 - Monday/Tuesday, May 25/26. ___ all session; or what part _____.
#5 - Wednesday/Thursday, May 27/28. ___ all session; or what part _____.
or ___ no sessions at camp, but involved through _____.

State specific things you feel could be improved in any way, concerning management, services, facilities, programming, instruction, or anything else.

Please give a general evaluation of the total program.

Would you be interested in participating and able to participate in another such program if one is held ----
this fall? yes ____. no ____.
next spring? yes ____. no ____.

(Note: We will not take your answer here as any sort of a commitment, but only as an indication that we may contact you again.)

Any other comments you care to make?

gned _____ Address _____
_____ zip _____

Results of Teacher evaluation of the

Environmental Education Workshop, (3 credits), Spring 1970

-- based on anonymous evaluation statements from the 52 students in the course (39 were teachers, and 13 were upper division EMC students). Date of evaluation: May 18, at conclusion of the last session, at the Lions Camp, Red Lodge. (Original evaluations on file in Dr. Grilley's office, EMC.)

A. Positive Comments

Tally		Item
37	-	Good program. Varying specific comments made, such as: practical, good variety, eye-opener, tremendous, well planned, stimulating, unlimited opportunities, outstanding educational experience, most worthwhile, taught awareness of environment, wealth of ideas.
13	-	"Learn by doing" aspects of program very good. Gave total participation opportunity.
19	-	Instructors excellent.
1	-	"Web of Life" good.
1	-	Better understanding gained of need for environmental education for children and community.
1	-	Lots of transfer possible from teacher to student, of things learned in this course.
3	-	Inspirational program good.
8	-	Food service good.
4	-	Plot study valuable.
3	-	Aquatic study well done.
2	-	Enjoyed getting involved.
1	-	Gave new experiences and content.
1	-	Great applicability.
1	-	Now have more tools for realistic math, science, and geography programs.
1	-	Each school needs reference books on this topic.
1	-	All elementary teachers should have this.
1	-	Can now see lots of possibilities for children and their families.
1	-	Regret did not have this years ago.
1	-	Appreciated sociability of instructional staff.
1	-	Motivated to use school facilities more.
1	-	Erickson did much to aid the program.
2	-	Geographic activities good.
1	-	Display of source materials very good.
1	-	Enjoyed the independence from books, in this workshop. That is, it involved first-hand experiences, not just reading about experiences.
1	-	Dr. Grilley contributed valuable material.
2	-	Appreciate grading system.

B. Constructive Suggestions, and Criticisms

Tally		Item
15	-	There was too much material presented too rapidly.
6	-	A course like this should be over a longer period of time. (Several suggestions were made, such as (a) 10-11 week extension course, weekday evenings, with 2 or 3 Saturday field trips or field experiences; (b) hold course for more meetings, even if it means more Saturdays; (c) need longer course with more credit.
1	-	Want more experiences and less talking.
6	-	Have a graduate course based on needs, even if content is undergraduate or a "first course" in the subject.
1	-	We teachers needed to be better prepared for the camp experiences.
1	-	Need evening time open. Schedule was too tight.
4	-	Bird walk disappointing -- no birds.
1	-	Workshop group should have been broken into grade levels for at least a few discussion periods, i.e.: lower elementary teachers together, upper elementary together, etc.
1	-	Workshop should include the use of the environment for teaching physics and chemistry, as well as those topics which were covered.
1	-	Suggest Friday night arrival at camp, so Saturday would not be such a long day.
1	-	Would help to have a display of science, conservation, geography projects built by students.
1	-	Need more on animals.
1	-	Need more "hand-out" summary sheets for the students in the workshop.
1	-	Need more specific ideas for geographic activities and projects.
1	-	Need alternate indoor plan in case of bad weather.
1	-	Rocks and geology session needs better planning.
5	-	Need to issue name tags.
1	-	For a 3-session workshop, it would have been better if the sessions had been two weeks apart, rather than on successive Saturdays.
1	-	Need followup course(s) and program.
1	-	Want year-long program.
2	-	Need time between instructional sessions; and pre-planning time to read and discuss.
1	-	Need some provisions for individual to examine differences of grade level needs.
1	-	Enjoyed the coffee breaks.
1	-	Need longer time to look at resource materials.
1	-	How does one adapt these ideas to a rural 1-8 school?
1	-	Need flower and tree identification.